

# The International Coaching Federation (ICF) Artificial Intelligence (AI) Coaching Framework and Standard

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# 1 Overview

## 1.1 Foreword

Coaching helps individuals improve their performance and achieve their potential, as well as improving their workplaces (Athanasopoulou & Dopson, 2018). As with many other domains, the advent of Artificial Intelligence (AI) offers new opportunities (Jarrahi, 2018; Mikalef & Gupta, 2021). In 2024, AI has been used in conjunction with, or as an adjunct to human-to-human coaching for several years (Graßmann & Schermuly, 2020; Malafronte & Loufrani-Fedida, 2023; Terblanche et al., 2022).

This blended approach can provide the best of both worlds where coaches can offload tedious coaching activities such as delivering assessments, scheduling appointments or sending reminders to journal. As a result, AI used well allows coaches to invest more in the high value work of complex, transformational coaching in the human-to-human domain. AI also offers the opportunity for fully automated Coaching Services, provided entirely by AI, with the potential to greatly expand the number of people who can benefit from a Coaching Service.

AI technologies allows coaches to find ways to move deeper into organizations such as working with managers and leaders to enhance their coaching skills, provide additional learning opportunities for students and trainees, or assist organizations in building a coaching culture. Because AI makes coaching vastly more affordable, it can make coaching accessible to more people across the globe, enhancing the societal impact of coaching especially in the developing world. As coaching becomes accessible to more people, awareness grows and potentially increases the size of the market dramatically.

But, as with other deployments of AI, there are also risks such as bias that can threaten coaching (Akter et al., 2021). Coaching requires disclosure of personal information about individuals, which can be sensitive. Clients invest emotionally in coaching relationships and those relationships become a significant element of their professional life. While in some ways the potential risks that might arise are comparable to other areas of AI, the best risk mitigation methods will be determined by the specifics of the coaching context to be effective.

AI coaching standards can benefit coaching system providers to help them know what is required to produce a high quality system. These AI standards can also sensitize AI system developers about the need for safeguards in a wide range of important areas. These include conscientious treatment of client and coach data, engineering coaching science into AI systems, minimizing bias, and making clear distinctions between coaching and therapy.

We also hope that development of these AI coaching standards helps consumers make better buying decisions with the peace of mind that comes with knowing that the particular AI coaching technology has passed one or more levels of proficiency and ethical evaluation.

The ICF AI Coaching Standards have been developed for a broad audience:

- Coaches who want to use technology responsibly
- Coaching clients
- Organizations purchasing coaching
- Coaching supervisors
- Software developers (Providers)
- Coach training organizations
- Broader public

In the next section 2, we introduce the overarching framework that provides guidance to those wishing to develop AI Coaching Systems. The details of the ICF AI Coaching Standard appears in section 3. The standard gathers the core requirements for a basic AI Coaching System, and a more advanced system. The ICF believes that a common standard will help to encourage the use of scientific and engineering practices while also providing clarity for potential clients, coaches, and organizations looking to procure an AI Coaching System, enabling them to make their selection with confidence.

## 1.2 Working Group Members

In April 2021, the International Coaching Federation (ICF) convened a small working group, the Artificial Intelligence Coaching Standards Working Group, with expertise in technology, coaching, and standards development. The working group consisted of:

- Matt Barney ([XLNC](#) and [TruMind.ai](#))
- Joel DiGirolamo ([International Coaching Federation](#))
- David Drake ([The Moment Institute](#))
- Olivier Malafronte ([Université Côte d'Azur](#) and [PocketConfidant AI](#))
- Harry Novic ([Rocky.ai](#))
- Jonathan Reitz ([FLUXIFY](#))
- Nicky Terblanche ([University of Stellenbosch Business School](#) and [coachvici.com](#))

The working group, and an external expert on professional standard setting finalized these standards in 2024.

## 1.3 Introduction

We initially developed a set of AI Coaching Capabilities Assessment Guidelines according to our vision of AI coaching, which involves automating part of the interactive coaching process. We are also aware that AI can be used to support the analytics involved in tracking and measuring coaching activities (e.g., number of coaching sessions, length of coaching sessions, participants' speaking time, revenue generated, number of goals created, etc.).

In harmony with the ICF Updated Core Competencies,<sup>1</sup> AI coaching interactions are designed for reflection, learning, and making choices that best align with client needs, goals, experiences, and values. AI coaching may also include input from the AI Coaching System or other support facilitating client decision-making and action. In this way, AI coaching can be seen as a resource in support of learning, development, and performance that can be used by individuals, teams, and organizations independently or in conjunction with human-to-human coaching activities.

We believe that information and insights about the potential of emerging AI coaching technologies are important for practitioners, professional bodies, researchers, and organizations. Of particular interest to the Working Group is how these technologies can best augment human coaches to reduce risks and create positive outcomes for clients, organizations, and society. We see our role as supporting and guiding the coaching profession and practitioners as they make decisions about the uses of AI coaching technologies as well as doing the same for providers who are developing AI Coaching Systems for the coaching profession.

## 1.4 Glossary of Terms

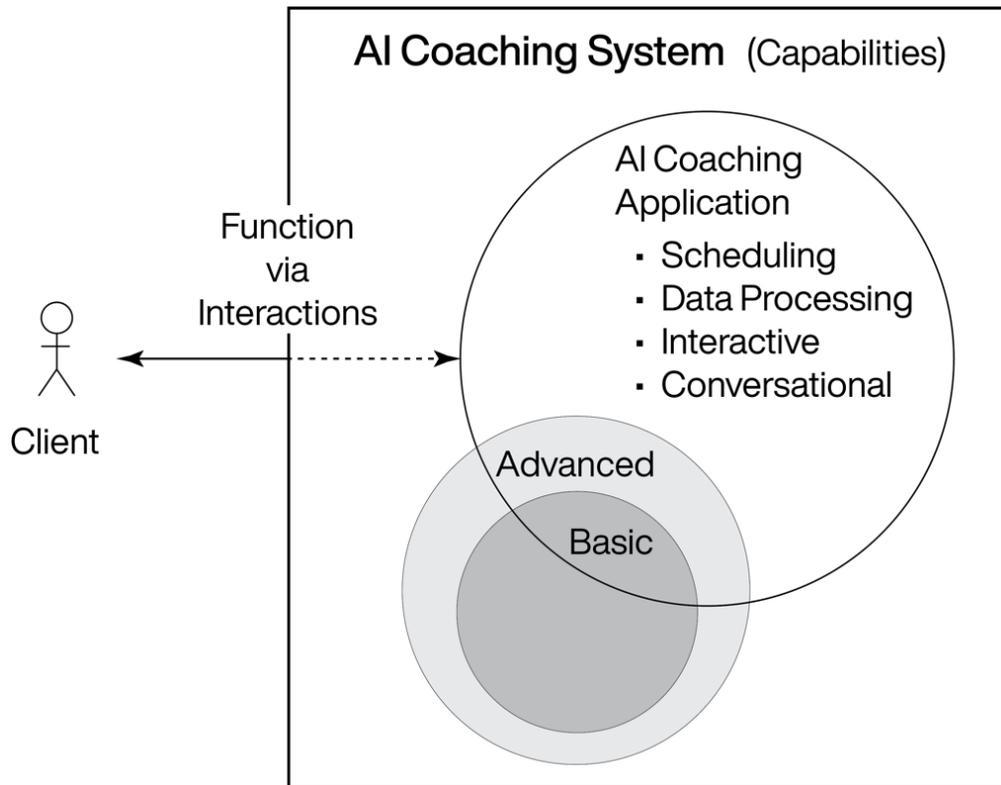
The following terms, when used in the standard and capitalized, are defined as stated below. Figure 1 shows the relationship of some of these elements relative to other elements in the framework.

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<sup>1</sup> <https://coachingfederation.org/core-competencies>

### Figure 1

*Relationship of AI Coaching Framework and Standards Elements*



**Table 1***Glossary of Terms*

<b>Term</b>	<b>Definition</b>
Advanced Requirement	Advanced is a higher level Standard provided by the ICF, for an AI Coaching System. It builds upon, and includes all of the requirements within, the ICF Basic Standard.
AI Coaching Application	The AI Coaching Application is the software package of the AI Coaching System that interacts with the User to provide specific Function in a specific Context. An example of an AI Coaching Application is a coaching chatbot. A Requirement may or may not be applicable to the AI Coaching Application since it may be applicable only at the System level.
AI Coaching Application Type	An AI Coaching Application may assist a coach in Scheduling or Data Processing, or may provide a Coaching Service in an Interactive or Conversational manner. See section 2.1.2 below for more detail about each type.
AI Coaching System	The AI Coaching System is the entity which provides the Function to the Client. The AI Coaching System includes the AI Coaching Application and any supporting documentation, functionality, and/or processes which exist outside of the Application but are utilized in the delivery of the Coaching Services, its management, and security. Since it is defined that the AI Coaching Application resides within the System, all Requirements apply to the System and they may or may not be applicable to the AI Coaching Application.
Basic Requirement	Basic is a Standard constituting a set of minimal, normative requirements, provided by the ICF, for an effective AI Coaching System.
Capabilities	The Capabilities of the AI Coaching System are features such as the ability to converse, or the ability to notify, that enable the Interactions and through which Content is delivered. An AI Coaching System generally provides some Function by utilizing a set of Capabilities.
Client	The Client is the User who interacts with the AI Coaching System for a specific Function.

Coach	The Coach is a human (User) or group of humans who provide Coaching Services to the Client, potentially through, or in partnership with the AI Coaching System.
Coaching	ICF defines coaching as “partnering with clients in a thought-provoking and creative process that inspires them to maximize their personal and professional potential”.
Coaching Expert	A Coaching Expert is a suitably knowledgeable, qualified and experienced person or group of persons, who are able to provide professional advice on coaching science and technology. A Coaching Expert may also be considered a Subject Matter Expert (SME).
Coaching Service	Individuals or organizations may offer human or blended Coaching Services to individual Clients or organizations. These services may include one-to-one coaching, team or group coaching, professional development resources, and assessments that may be combined with one or more forms of AI.
Content	The Content is the text, images, or other forms of media which the Client receives through Interactions with the AI Coaching System as part of the Coaching Services.
Context	The conditions or circumstances in which the AI Coaching System is used.
Formal Studies.	Formal Studies are peer-reviewed or unpublished scientific research that is designed and executed using well-established scientific methods to ensure that coaching (human or AI) are effective. They include formal measurement and methods to gain confidence in causal inference about the AI causing improvements in coaching clients (e.g. experiments, quasi-experiments, instrumental regression)
Function	The Function is to be delivered by the AI Coaching System and offers content, information, stimuli, guidance, and other interactions that the Client receives or experiences through interaction with the AI Coaching System. An example of a Function is interactive coaching through reflective dialog. A Function frequently utilizes a set of Capabilities.
ICF AI Coaching Standards	The standards section of this document, Section 3.

ICF AI Coaching Standards Element	The individual Standards, or Requirements are part of a standards Elements within the Framework. Each Element may have just a Basic Requirement or both a Basic and Advanced Requirement. Each element will also list which Application Types it is applicable to and what type of Requirement it is. Each Element has a designation of a letter followed by two numbers, indicating which Set the Element is in and which Domain that Set is located in. For example, the first Element in the Ethics Set is A.1.1.
ICF AI Coaching Standards Element Domain	Each ICF AI Coaching Standards Element Set is located within a Domain, labeled A through F. Domains A-D follow the ICF Core Competency Domain labeling.
ICF AI Coaching Standards Element Sets	Each Element is located within a Set. Sets one through eight (1-8) follow the ICF Core Competency numbering.
ICF AI Coaching Standards Framework	The structure or outline within which AI Coaching Standards are placed, consisting of Elements that are in groupings (Sets) and the Sets are grouped into Domains.
Interactions	Interactions are the set methods by which the AI Coach and the Client communicate, such as notifications, prompts, or conversations.
Language Expert	A Language Expert is a suitably qualified and experienced person or group of persons who is able to provide expert advice on use of language in one or more human languages with regards to its intelligibility for a given region or group of language users (e.g. linguist, translator).
Provider	The Provider develops or procures software and offers the AI Coaching System to the market.
Requirement	An ICF AI Coaching Standard, or Requirement for a System describes behavior or functionality necessary for a Provider to deliver in order to say they meet that standard. The words Standard and Requirement are used interchangeably in this document.
Requirement Type	A Requirement may be about the AI Coaching Application or System content, functionality, actions, or validation.

Standard	See Requirement.
Use Case	A Use Case is a potential scenario in which, through Interactions with the System, the Client moves towards a desired outcome.
User	A User is any individual or organization who acquires or accesses the AI Coaching System for use in a specific AI Coaching Application. The User may be a Client, Coach, or organization.

## 1.5 Abbreviations

AI	Artificial Intelligence
ICF	International Coaching Federation

## 1.6 Conformance and Certification

Providers are expected to either self-certify their AI Coaching System or work with a third-party organization to do so. The ICF AI Coaching Standard does not take an 'all-or-nothing' approach and Providers are free to specify which elements of the Standard they meet.

## 2 The ICF AI Coaching Standard Framework

### 2.1 Understanding the ICF AI Coaching Standard Framework

The first eight Standard Sets fit within the ICF Core Competencies structure. Those that follow, Standard Sets 9-13 are extended from the core ICF framework with additional details relevant for the field of software applications and AI in the use of coaching.

Domain	Standard Sets
(A) Foundation	1. AI Ethics* 2. Embodies a Coaching Mindset
(B) Co-Creating the Relationship	3. Establishes and Maintains Agreements 4. Cultivates Trust and Safety 5. Maintains Presence
(C) Communicating Effectively	6. Listens Actively 7. Evokes Awareness
(D) Cultivating Learning and Growth	8. Facilitates Client Growth 9. Reinforces Client Growth*
(E) Assurance and Testing*	10. Coaching Reliability Measures* 11. System Useability*
(F) Technical Factors*	12. Security and Privacy* 13. Resilience and Accessibility*

\* Indicates areas that have been added beyond the ICF Core Competencies.

#### 2.1.1 Standards (Requirement) Types

Within each Set there are different types of standards. For standards associated with Domains A-D, most of the requirements relate to either content, functionality, or actions. For capability domains E and F, there are validation requirements as well as content and functionality requirements.

The ICF AI Coaching Standard (Section 3) places requirements into the following types:

**1. Content.** Content means material that the organization developing the AI Coaching System must create and make accessible to the client. Content can

be any form of media, including text, images, audio, video, and graphics. Some content is about the system itself, for example, how the AI Coaching System works or how user data will be managed and protected. This content could be accessible within the application, on a website, or through other means. Other content is part of the Coaching Service and will generally be accessible within the application, such as questions that the AI Coaching Application may ask of the Client.

Content may be order dependent. For example, important notices relating to privacy policies or the limitations of the coaching system should be shared with the client before the provision of any Coaching Services, so they can make an informed decision whether to continue, and will be less likely to be surprised or disappointed by the System. Where content order is important, it will be indicated within the Standard.

Evidence of meeting content requirements can be a display of the content being accessed in the System.

**2. Functionality.** Functionality means specific abilities that the system must have, such as being able to store client goals or analyze specific types of inputs in order to make a determination that can affect some action that may be taken at a later date.

Evidence of meeting functionality requirements can be a video recording of a tour of the functionality requirement being used. This may not always be possible, for example where the functionality is not visible. In these instances validation evidence may be used.

**3. Actions.** Actions are specific tasks that the system must do, such as notifying the user or recording specific types of information. Some actions are time- or order-specific. For example, an action such as 'notify' may need to occur before the client begins a certain activity. This would be an order-dependent action. An example of a time-dependent action would be a 'check-in' that the system may make periodically with the client, perhaps weekly.

**4. Validation.** Validation involves demonstrating that a system achieves its objectives. It can include evidence that an AI system meets a certain quality standard, or helps the client systematically achieve one or more goals. When these properties or the relevant quality threshold is measurable, then the best course may be a test, where the system is tested to see if the object does in fact have the stated property or meet the given threshold. For example, ensuring a system is available most of the time can be tested by looking at the collective downtime for the system.

Other types of validation include expert review, where a relevant expert will assess an object within the system to determine if it is of sufficient quality. This

could be a Coaching Expert validating that the content being used in the system is appropriate or a Language Expert validating that the language used in the content is appropriate and suitable for the target audience.

Some validation is required prior to or while the system is being developed, such as a review of the content. Other validation needs to happen after the system is in operation, such as validating client satisfaction and the efficacy of the system intervention with clients.

The Standard in Section 3 provides a summary of which Requirements are of which type.

## 2.1.2 Application types

As coaches have used new digital technologies, a plethora of different types of new coaching tools have emerged. Roughly these can be placed in four key groups. Note that these are not clear distinctions, with some tools straddling the line between different groups. However, in general, the first two: scheduling and data processing, are coach assisting tools. They primarily support a coach in their provision of a human or blended Coaching Service. The latter two, interactive and conversational are different in that they are providing Coaching Services to the client directly. This may still be in support of a human coach, or it may be as a standalone service.

This Framework, and the associated Standard, focus primarily on the latter two categories of application—interactive and conversational. This is because, as well as being coaching-specific, unlike some of the assistive technologies, they have two distinct qualities that make them potentially higher risk, and potentially more impactful. The first is that by providing a Coaching Service, rather than, say, a scheduling service, they are likely to be processing more sensitive data and engaging with the client on more sensitive topics. As such, their ability to impact the client, positively or negatively, increases. This means that greater consideration must be taken to ensure a minimum level of quality. The second difference is that they may be providing a Coaching Service independently of a human coach. This means there is the potential for them to reach vastly more clients, unrestrained by the natural limit on the availability of human coaches. This potential for large scale means a lot more people may be affected, and, again, necessitates the need for minimum standards.

### **Coach Assisting Applications**

**1. Scheduling:** Applications which assist with time-related activities such as meeting planning, following up with clients, and other reminders. Examples are a weekly activity report sent by email or weekly reminders sent through a mobile application. While these applications are not necessarily specific to coaching, they may utilize AI.

**2. Data Processing:** Analysis tools which process data that is accessible in a given environment (e.g. emails, calendars, feedback) or that is provided (e.g. post-review feedback, ratings, evaluations, attendees' speaking time) and generate relevant outputs or measurements that can provide information for the coaching process. These outputs then require a coach or other entity to use them in order to be impactful. Examples are sentiment measurement, FAQ (Frequently Asked Questions) generation, scoring systems based on individual assessments, and coaching or training commitment based on individual logins.

### Coaching Service Applications

**3. Interactive:** Interactive applications are those in which the AI interacts directly with clients who provide input such as feedback, ratings, planning elements (dates or hours), and conversational elements. These interactions can nudge clients and shape their behavior. As such they can be considered to be providing Coaching Services. An interactive application can also be a conversational application. Examples are habit-building quizzes made through a mobile application and email prompts relating to a specific goal or topic.

**4. Conversational:** These AI applications can identify, interpret, make inferences, or learn from provided data to help users achieve their objectives through written text, spoken language, or video as part of a Coaching Service. Examples are coaching chatbots, voicebots or avatars providing coaching conversations with individuals or groups.

The interactive and conversational application types overlap significantly in that they both involve provision of Coaching Services. They have comparable risk, and as such many of the required best practices stated in the Standard apply equally to both.

#### 2.1.3 Providing Feedback

Work on the ICF AI Coaching Framework and Standard continues. If you have any comments or questions, feel free to provide input at the survey link [here](#).

#### 2.1.4 Using the AI Coaching Standard Framework

The ICF AI Coaching Framework and Standard aims to support organizations developing AI Coaching Systems by providing guidance on best practices and highlighting important considerations. The primary goal for the ICF AI Coaching Framework and Standard is to inform and help organizations navigate potential challenges in developing AI coaching tools.

The standard covers each of the six domains and within those each of the thirteen capabilities (Standard Sets) introduced in 2.1 above. For each capability it provides a brief introduction, an overview of the key properties and why they matter, advice and FAQs targeted at relevant potential practitioner groups, and information on potential artifacts that may be generally helpful, and/or necessary to evidence conformance with the associated requirements. It also includes a high level summary of the maturity stages for each capability. Maturity levels aim to help organizations both understand where they are currently, and then to break down the steps they need to follow in order to ensure the quality of the AI coaching system.

The Standard was designed to be useful to many parties, including:

- Developers of AI Coaching Systems so that they know what is important to all interested parties, including the Users, Coaches, and Purchasers of Coaching Services,
- Purchasers and Coaches, so that they understand parameters upon which to compare and evaluate different AI Coaching Systems, including capabilities, ethics, and data privacy, and
- Clients so that they may develop an understanding of an AI Coaching System and will provide an expectation of the parameters involved so that they may express any concerns to the Provider or precautions they may feel they need to take.

## 2.2 The AI Coaching Standard Framework

### 2.2.1 A. Foundation: Introduction & Overview

The foundation elements relate to ethics and the coaching mindset. These two aspects are crucial to ensuring that the right values are embedded in all design decisions and core functionality of the system.

#### 2.2.1.1 A.1 Foundation: AI Ethics

AI driven services create new ethical considerations and risks. Especially at this point in time, when AI assisted services and AI services are still fairly novel, there is the need to introduce and explain key properties of these systems. It's also important that decisions made by these systems are transparent and actions are taken to minimize the transfer of existing human biases into the AI systems and prevent new biases from emerging. Overall, AI coaching applications should be designed in alignment with codes of conduct that ensure an automated system is able to respond to situations in an ethical way that supports and complements the ICF Code of Ethics.

### 2.2.1.2 A.2: Foundation: Embodies a Coaching Mindset

A coaching mindset is one that is open, curious, flexible, and client-centered. These are human attributes, and the AI coaching platform should mimic these characteristics.

## 2.2.2 B. Co-Creating the Relationship: Introduction & Overview

Research has established the importance of a coaching relationship. Many elements combine together to create the depth of relationship necessary for a client to feel safe in the coaching relationship. While the development of a coaching agreement may be relatively simple with AI, a depth of presence and creation of a trusting and safe relationship may be more difficult.

### 2.2.2.1 B.3: Co-Creating the Relationship: Establishes & Maintains Agreements

In AI coaching, as in human coaching, the software's success depends on the client's engagement and commitment to the coaching goals, and process. To foster this, the AI Coaching System collaborates with the client and stakeholders to establish clear agreements for the coaching engagement and each session. Key elements include ensuring the client understands the interaction's purpose and outcomes, obtaining explicit consent for each intervention with an opt-out option for client control and ownership, and proceeding to the next stage only with the client's readiness and explicit permission, maintaining their continued buy-in throughout the process.

### 2.2.2.2 B.4 Co-Creating the Relationship: Cultivates Trust and Safety

In AI coaching, establishing a safe and supportive environment is important. This involves several key strategies: firstly, fostering trust through transparency about the AI's design and ownership; secondly, promoting inclusive dialogue and responsiveness to feedback; thirdly, differentiating between universal and domain-specific coaching aspects, ensuring clients understand the AI's applicability to their areas of interest; fourthly, providing access to human experts when issues exceed the AI's scope; and finally, prioritizing client safety, especially in mental health matters, by offering guidance and connections to other relevant services.

### 2.2.2.3 B.5 Co-Creating the Relationship: Maintains Presence

In AI coaching, the system should maintain a stance similar to a human that is open and flexible. Firstly, the AI should not be overly anthropomorphized or misleading in presentation to avoid unsettling the client. Its tone should be straightforward and clear. Secondly, enhancing user experience by allowing

clients to review their previous inputs may improve their engagement and reflection. The more accessible this feature is, the better. Thirdly, akin to human coaches who assess and respond to a client's emotional state, AI coaching applications, when capable, should use these insights to adjust their interactions accordingly wherever allowed by law. This can deepen the client-coach relationship, prevent conflict or disengagement, and support the client's development in their "Goldilocks Zone" (not too hard or easy but just right). These principles help in making AI coaching more effective and client-centric.

### 2.2.3 C. Communicating Effectively: Introduction & Overview

Effective communication in an AI coaching system involves emulating the app doing active listening to fully understand the client and then use that to evoke client awareness through diverse methods such as personalized assessments, reflective questioning, and scenario simulations, coupled with detailed feedback and progress tracking. These tools collectively aid in uncovering clients' strengths, weaknesses, and behavioral patterns, facilitating deeper self-discovery and goal-oriented growth for the client.

#### 2.2.3.1 C.6 Communicating Effectively: Listens Actively

In AI coaching, active listening involves understanding both the spoken and unspoken aspects of client communication, contextualizing their words for meaningful interactions. The AI system should base interventions on this contextual awareness, considering past interactions and the client's current state, while clearly explaining its actions and rationale. Additionally, it should offer timely, context-specific feedback to support client growth, enhancing understanding and facilitating actionable insights.

#### 2.2.3.2 C.7 Communicating Effectively: Evokes Awareness

An AI coaching application can enhance client self-awareness and insight using various techniques like powerful questioning, metaphors, and analogies. It should offer a range of context-specific stimuli, such as open questions and moments of silence, to resonate with the client and foster self-realization. Additionally, the system should encourage big-picture thinking by presenting alternative perspectives and linking insights, aiding clients in understanding the interrelation of ideas and their broader implications.

### 2.2.4 D Cultivating Learning and Growth: Introduction & Overview

Cultivating learning and growth is the core of coaching and can be broken into two components; facilitating client growth, and reinforcing client growth.

#### 2.2.4.1 D.8 Cultivating Learning and Growth: Facilitates Client Growth

An AI coaching application should effectively help clients convert insights into actionable goals while fostering client independence. Key functionalities include assisting in setting, tracking, and adjusting SMART goals, facilitating storytelling and meaning-making, and supporting clients in re-evaluating their goals as circumstances change. Additionally, the system should aid in clarifying problems, generating alternative solutions, and considering the consequences of different choices, ensuring a comprehensive and adaptive coaching experience.

#### 2.2.4.2 D.9 Cultivating Learning and Growth: Reinforces Client Growth

An AI coaching application should employ methods that reinforce and guide clients towards their desired outcomes and future behaviors. This includes tracking and validating progress to inform decision-making and motivate clients, as well as helping them stay on track toward their goals. The system should provide timely reminders and reinforce insights to maintain focus and momentum. Additionally, it's important for the AI to help clients translate learning into actionable steps and celebrate their successes to sustain growth. The capability to track progress through milestones and assess overall advancement is also key, ensuring a structured and supportive coaching journey.

### 2.2.5 E Assurance and Testing: Introduction & Overview

Quality assurance and testing are crucial to ensure that the system is effective and achieves its intended objectives. The earlier sections A-D focuses on the kinds of content, capabilities, and behaviors of the systems. This section instead looks at what can be done to validate that the AI system performs effectively. This section is split into two, the first subsection (E.10) looks at validation and testing that can be applied to the coaching content, capabilities, and behaviors. The second section (E.11) looks at testing that ensures technical aspects of the system operate as intended.

#### 2.2.5.1 E.10 Assurance and Testing: Coaching Reliability Measures

For an AI coaching application to be reliable and effective, it is crucial to quantitatively demonstrate system reliability. This includes collecting evidence of effectiveness, which can range from client feedback to formal experiments, and potentially comparing it to the efficacy of human coaches. The responsible organization should verify that the system's capabilities and operations are as

claimed, ensuring accuracy, transparency and reliability. Before launch, testing with a sizable group is necessary to identify bugs and gather insights for improvement. The quality of the data driving the AI models is critical, requiring thorough quality assurance tests to avoid biases and ensure utility. Incorporating expert guidance, such as a coaching committee, can enhance the product's quality and trustworthiness. Finally, ensuring that the system's responses are contextually appropriate is vital for maintaining client engagement and meeting their needs effectively.

#### 2.2.5.2 E.11 Assurance and Testing: System Usability

An effective AI Coaching System should be user-friendly and not overly complex, with content that is easily understandable. Integration with relevant platforms and robust accessibility are also key for user convenience. To ensure usability, developers should gather and publish evidence on user satisfaction. Systems should be intuitive, minimizing the need for extensive training or onboarding, and should explain their core functionalities in plain language, avoiding technical jargon. Content should be tailored to various audiences, considering cultural sensitivities and language differences, and ensuring it is free from controversial or discriminatory elements. Accessibility can be enhanced by offering multiple access points, like websites or apps, and building integrations with key channels or developing APIs. Finally, system performance, including response times, is crucial for user satisfaction, and should be optimized through architectural decisions and regular assessments.

#### 2.2.6 F. Technical Factors: Introduction & Overview

While not specific to coaching per se, certain requirements are necessary for any consumer product storing personal and potentially sensitive information. AI Coaching Systems should meet minimum security and privacy requirements.

##### 2.2.6.1 F.12 F. Technical Factors: Security and Privacy

In AI coaching applications, data security hinges on the CIA triad: confidentiality (preventing unauthorized data access), integrity (protecting data from unauthorized alteration), and availability (ensuring system access for authorized users). Key security measures include encrypting data at rest and in transit, following industry standards like NIST guidelines, validating user credentials with strong authentication processes, and safeguarding backend systems. Additionally, ensuring system availability with minimal service interruptions and conducting thorough reliability and bug testing prior to launch are crucial for maintaining user trust and satisfaction.

Data privacy is crucial for AI coaching applications, requiring adherence to varying data protection laws across jurisdictions. These applications should

minimize personal data, using methods like pseudonymization and data binning, and ensure users are informed about how their data is used, including sharing with third parties and data protection measures. Consent for data processing is essential, and system providers must be aware of the storage and management of data, legal requirements in target markets, and the integration with key user channels and backend systems for optimal performance. For buyers and users, awareness of legal frameworks like GDPR and understanding security and privacy aspects of the AI coaching application are vital. Organizations should develop clear security and data minimization policies, and consider creating user-friendly content about security and privacy practices.

#### 2.2.6.2 F.13 Technical Factors: Resilience and Accessibility

In AI coaching systems, ensuring resilience and accessibility, in line with the Americans with Disabilities Act of 1991, is crucial. These systems must incorporate adaptive technologies and design principles that cater to a wide range of disabilities, including visual, auditory, motor, and cognitive impairments, ensuring equal access and usability for all users. This involves implementing features like screen readers, voice recognition, and user-friendly interfaces with sufficient contrast and navigability, alongside regular testing and updates to maintain system robustness and accommodate evolving accessibility needs.

### 2.3 Notices & Disclaimers

All systems should encourage users to seek expert human guidance for complex personal or professional issues, even if non-medical. Despite efforts to ensure the accuracy and reliability of its algorithms, AI system recommendations and insights may not fully be able to address each individual's unique context. Additionally, while each system should be designed with a commitment to inclusivity and non-discrimination, AI system designers should clarify to users that most AI has inherent limitations in completely eliminating biases. Engineers are encouraged to continuously work towards minimizing these biases in the system functionality.

### 2.4 Overview of the Standard

The ICF has established these standards to guide developers in creating responsible AI coaching applications and help clients identify systems that adhere to these best practices, ensuring both expanded access and the mitigation of systemic risks.

The requirements in the ICF Standard are divided into thirteen Standard Sets which are grouped into six Domains:

- (A) Foundation
- (B) Co-creating the Relationship
- (C) Communicating Effectively
- (D) Cultivating Learning & Growth
- (E) Assurance and testing\*
- (F) Security and Privacy\*

The first four Domains reflect the ICF Core Competency Framework as used for human coaches. The same principles have been applied here, although resulting in different criteria. Domains E and F are novel and respond to AI and application specific considerations.

Within each Domain requirements are grouped based on the type of requirement. The types vary between some of the Domains. For example, many of the requirements found in A-D relate to content, functionality, or an action that is required in the AI Coaching System. Whereas in Domain E many of the requirements relate to validation and testing measures. Different properties are required for different types of requirement, and different types of evidence would be sought to prove the requirement has been met. For example, content requirements can be evidenced by producing a copy of the content, while testing and validation requirements can be evidenced through test results.

The table below is intended to help those developing AI coaching applications to find requirements more easily by type in order to inform product development planning.

Table of requirements by type

Type	Requirements
Content	A.1.2, A.1.3, A.1.5 B.4.1, B.4.3, B.4.5 C.6.2 C.7.1, C7.2 E.11.2 F.13.2
Functionality	B.3.3 B.4.4, B.4.5 B.5.2, B.5.3 C.6.1, C.6.2, C.6.3

	C.7.3, C.7.4 D.8.1, D.8.2, D.8.3, D.8.6 D.9.1, D.9.5, D.9.6 E.10.1, E.10.3, E.10.5 E.11.2, E.11.6 F.12.1, F.12.2
Action	A.1.1, A.1.2, A.1.3, A.1.5 B.3.1, B.3.2 C.6.1, C.6.3 C.7.2, C.7.3 D.8.4, D.8.5, D8.7 D.9.2, D.9.3, D.9.4, D.9.5 F.13.2 , F.13.3
Validation	B.3.3 E10.1, E.10.2, E.10.4, E.10.5, E.10.6, E.10.7 E.11.1, E.11.2, E.11.3, E.11.4, E11.5 F12.3

## 2.5 Guidance on using the standard

This Standard relates to an AI Coaching System. It is the System that conforms or does not conform with the Standard.

This Standard is best understood in the context of the framework to which it is appended. The framework provides useful additional information to help an organization develop a System. However, the framework does not include any separate normative requirements for the Standard. As such the Standard (Section 3) can be used as a standalone document.

### 2.5.1 Buyers & Users

For organizational buyers, you need to understand how coaching fits into your safeguarding policy, the goals you have from your coaching system, and how the AI coaching system aligns with these policies and objectives.

### 2.5.2 Provider

At a minimum, the organization developing the AI system should have:

- A plain English explanation of the core functionality of the system
- Details on the data privacy and compliance requirements
- A store of relevant research and literature that forms the evidentiary basis for the methods and content used by the application

ICF also recommends providers to have a coaching advisory committee or board to monitor and ensure the effectiveness of coaching investments.

## 3 The ICF Artificial Intelligence Coaching Standards

Each requirement is part of a standard specification Element within the Framework. Each element may have just a Basic Requirement or both a Basic and Advanced Requirement. If a Provider wishes to claim meeting an Advanced Requirement, they must also meet the Basic Requirement for that Element. Each Element also lists the relevant use cases called “Application Types” and describes what type of Requirement it is. Elements are designated by a letter followed by two numbers, indicating which Set the Element is in and which Domain that Set is located in. For example, the first Element in the Ethics Set is A.1.1.

The framework used to specify the four requirement types that are applicable to four types of AI include:

- Requirement Types: Content, Functionality, Actions, and Validation
- Applicable to: Scheduling, Data Processing, Interactive, Conversational

### 3.1 A.1: Foundation: AI Ethics

Coaching is a partnership that requires buy-in from the client to be effective. To ensure the client is engaged and committed to the partnership and their goals, they need to be a part of decision making, feel safe and have trust in the coach and the process, and feel that the coach is present and working to understand and support them. The AI Coaching System partners with the client and relevant stakeholders to create clear agreements about the coaching relationship, process, plans, and goals. They establish agreements for the overall coaching engagement as well as those for each coaching session. There are three key elements of establishing and maintaining agreements:

**Element A.1.1: AI Disclosure:** The user should know when they’re interacting with an algorithm and not a person. People behave differently when they think they’re speaking to a human, and being deceived can damage trust and cause concern for the user. Providing a clear indication of when the user is interacting with an algorithm can help avoid this, for example, by use of an icon or a name that indicates the entity is not human.

- Requirement Type: Action
- Applicable to: Interactive, Conversational
- Requirement (Basic): The System shall indicate to the Client that it is not human prior to the provision of Coaching Services to the Client.
- Requirement (Advanced): The System shall indicate to the Client that it is not human at least once during each interactive or conversational session.

**Element A.1.2: System Limits:** The User should understand the limits of the system. Setting expectations is important to ensure that the system is not used inappropriately, or that a User fails to seek alternative options believing their needs can be met with the system, if this is unrealistic. In order to set expectations a Provider must first assess what the relevant limitations are, and then think about how and when this information may be presented to the User.

- Requirement Type: Content, Action
- Applicable to: Interactive, Conversational
- Requirement (Basic): The System shall state relevant limits of its capabilities prior to the provision of Coaching Services to the Client.
- Requirement (Advanced): The System shall state relevant limits of its capabilities throughout various use cases when relevant.

**Element A.1.3: Algorithm Transparency:** The AI Coaching Application should be transparent about how the underlying algorithms work. Thought should be given to what level of description is most valuable. A full technical breakdown will be incomprehensible to most audiences, but highlighting the kinds of methods used, and the underlying logic being utilized can help boost trust.

- Requirement Type: Content
- Applicable to: Scheduling, Data Processing, Interactive, Conversational
- Requirement (Basic): Provider shall make publicly available documentation on the types of algorithms used and their basic functionality. The Provider is not required to release confidential or proprietary information to meet this requirement.

**Element A.1.4: Action Explainability:** Where the AI has made a meaningful decision, the AI coaching application should support a user who wants to understand why specifically that decision was made. AI explainability can be complex but there are tools that can be deployed that may help. For example, sometimes a useful way of helping explain a decision is to explain what other decisions could have been made, and what would need to have been different for another option to be selected by the AI.

- Requirement Type: Content
- Applicable to: Scheduling, Data Processing, Interactive, Conversational
- Requirement (Basic): Provider shall make publicly available documentation on the general ways in which decisions are made by the AI Coaching System. Provider is not required to release confidential or proprietary information to meet this requirement.
- Requirement (Advanced): Provider shall make publicly available documentation on the categories and methods used for decisions in each category made by the AI Coaching System. Provider is not required

to release confidential or proprietary information to meet this requirement.

**Element A.1.5: Bias:** AI systems, being trained on real world data often use atheoretical methods that are hard to explain and can perpetuate existing biases and prejudices. They can also suffer from new kinds of bias such as sampling bias, where the training data isn't representative of the real world. Biases can also arise from design decisions; optimizing for one outcome over another can result in bias. Whenever deploying AI systems it is important to think carefully about how the system might be biased and how the impacts of these biases can be mitigated. Organizations developing AI coaching applications should check their data and models for bias and take appropriate steps, such as correcting for bias where possible, or using quality assurance methods to eliminate bias from affecting users. As a last resort, systems should alert users to potential or actual bias where appropriate.

- Requirement Type: Content, Action
- Applicable to: Scheduling, Data Processing, Interactive, Conversational
- Requirement (Basic): The System shall notify the Client of any potential biases in the Application and provide sources for any evidence used to ascertain that these biases may exist.
- Requirement (Advanced): Quality assurance methods that guarantee biases to be rare or non-existent.

**Element A.1.6: Data Transparency:** All parties involved in AI coaching are concerned about where and how their data is stored, as well as who will have access to it.

- Requirement Type: Content, Action
- Applicable to: Scheduling, Data Processing, Interactive, Conversational
- Requirement (Basic): The Provider shall supply documentation identifying who within the Provider organization will have access to coach and client data as well as provisions for User access.
- Requirement (Advanced): The Provider shall have publicly available documentation identifying all parties who may have access to coach and client data and where the data will be stored.

**Element A.1.7: Consent to AI Coaching:** It is important to clients that they understand when the coaching process has started.

- Requirement Type: Content, Action
- Applicable to: Interactive, Conversational
- Requirement (Basic): The System shall require the Client to agree to the AI coaching, stating that a human will not be involved.

## 3.2 A.2: Foundation: Embodies a Coaching Mindset

Coaching, whether delivered by an AI or human, is characterized by certain foundational principles and types of interaction that shape how a coaching session and relationship should operate. It is important that these coaching elements are embodied in the AI Coaching System.

**Element A.2.1: Coaching Approach:** The AI Coaching System should follow an open, flexible approach that may share observations and insights, without following a rigid protocol or algorithm. This approach should have the potential to create new learning or performance support for the client

- Requirement Type: Content, Action
- Applicable to: Interactive, Conversational
- Requirement (Basic): The AI Coaching System is mostly non-directive and generally supports a coaching mindset and approach to partnering with the client. If clients compared AI Coaching System responses, they may find some similarities.
- Requirement (Advanced): The AI Coaching System exhibits direction only when science suggests additional supports are most appropriate and AI responds in a fluid, graceful and dynamic manner, helping the client realize their goals. Clients comparing AI Coaching System responses will find little similarity in responses.

## 3.3 B.3: Co-Creating the Relationship: Establishes and Maintains Agreements

It is important that the System acts in partnership with the client and relevant stakeholders to create clear agreements about the coaching relationship, process, plans, and goals. An effective coaching relationship requires buy-in from the client, both within each coaching session and for each agreed action, and to the wider relationship and longer term goals.

### **Element B.3.1: Service Information and Benefits**

The System should provide clear and comprehensive information about the services offered and the potential benefits to ensure informed client decisions.

- Requirement Type: Behavior
- Applicable to: Interactive, Conversational
- Requirement (Basic): The System shall inform the Client of the services it is able to offer and the potential benefits prior to the provision of Coaching Services to the Client.

### **Element B.3.2: Client Opt-in for Services**

It is vital for the System to secure explicit consent from the Client before initiating Coaching Services, upholding the principle of informed choice.

- Requirement Type: Action
- Applicable to: Interactive, Conversational
- Requirement (Basic): The System shall ask the Client to opt in to the service prior to the provision of Coaching Services to the Clients

### **Element B.3.3: Assent for New Use Cases**

For maintaining a respectful and informed coaching environment, the Application must seek the Client's assent before introducing new Use Cases during the coaching process.

- Requirement Type: Validation
- Applicable to: Interactive, Conversational
- Requirement (Basic): The Application shall require assent from the Client before progressing to a new Use Case for the majority of new Use Cases.

## **3.4 B.4: Co-creating the Relationship: Cultivates Trust and Safety**

Coaching should take place in a safe, supportive environment that allows the client to share freely. It is important for the System to maintain a relationship of mutual respect and trust.

### **Element B.4.1: Information on AI Design and Intent**

The System should provide comprehensive information about its creators, scientific foundations, ownership, and research supporting its design to enhance transparency, trust and user understanding.

- Requirement Type: Content
- Applicable to: Scheduling, Data Processing, Interactive, Conversational
- Requirement (Basic): The System shall provide the Client with information on the creators, theoretical bases, ownership, and research supporting the design of the AI in the Application.

### **Element B.4.2: Inclusive Dialogue and Responsiveness**

In the coaching process, fostering an inclusive dialogue between the client and specialists is crucial. The System must be designed to facilitate open, respectful, and understanding communication, enabling a space where the client feels heard and valued. Additionally, the System's ability to react appropriately to support and feedback is essential for adapting to the client's evolving needs and maintaining an effective coaching relationship.

- Requirement Type: Communication, Responsiveness
- Applicable to: Interactive, Conversational
- Requirement (Basic): The System shall facilitate an inclusive dialogue between the Client and specialists, ensuring that all interactions are respectful, culturally sensitive, and client-centered. The System must also demonstrate the ability to respond effectively to the Client's support needs and feedback.

### **Element B.4.3: Domain Specificity Information**

The System should clearly inform the Client about its domain specificity and the utility within that domain to set accurate expectations and effective usage.

- Requirement Type: Content
- Applicable to: Scheduling, Data Processing, Interactive, Conversational
- Requirement (Basic): The System shall inform the Client whether or not it is domain specific, with an explanation of its utility within that domain.

### **Element B.4.4: Access to Human Coach**

Ensuring the Client has the option to engage with a human coach, the System should provide a mechanism for this interaction.

- Requirement Type: Functionality
- Applicable to: Interactive, Conversational
- Requirement (Basic): Basic instructions on finding a human coach
- Requirement (Advanced): The System shall provide a way for the Client to access a Coach via scheduling or on-demand.

### **Element B.4.5: Mental Health Risk Indicators**

The System should actively search for potential indicators of mental health risks in clients, and communicate its limitations in handling such situations.

- Requirement Type: Functionality and Content
- Applicable to: Interactive, Conversational
- Requirement (Basic): The System shall warn that it is not meant for mental health, and provide information about how they can access help if needed.
- Requirement (Advanced): The System shall search for potential indicators of mental health risk from the Client. If indicators are identified, then the Application shall communicate the limits of its capabilities and the Service.

## 3.5 B.5: Co-Creating the Relationship: Maintains Presence

To ensure effective client engagement, a coaching system needs to be work towards ensuring the client remains focused with a sense of presence. This can be achieved by employing a style that is open, flexible, grounded, and confident.

### **Element B.5.1: Avoiding Deception Overview**

To avoid confusion and any “uncanny valley” effect (Ciechanowski, et al., 2018), the AI coaching application should not be overly anthropomorphised, or presented in a deceptive or misleading way. The application should maintain a balance in its tone and presentation to ensure clarity and comfort for the client.

#### **Element B.5.1.1: Clear Representation of AI Nature**

The System shall explicitly indicate its artificial nature to the Client, avoiding any ambiguity about its non-human status.

- Requirement Type: Content & Action
- Applicable to: Interactive, Conversational
- Requirement (Basic): The System shall clearly state its AI-driven nature in its user interface and interactions.
- Requirement (Advanced): The System shall include periodic reminders of its artificial nature in ongoing interactions, ensuring continuous clarity and preventing misconceptions.

### **Element B.5.1.2: Tone and Presentation**

The System's tone and presentation shall be designed to be professional, straightforward, and devoid of excessive human-like attributes that could mislead or unsettle the Client.

- Requirement Type: Content, Actions
- Applicable to: Interactive, Conversational
- Requirement (Basic): The System shall employ a neutral and professional tone in its communications and interface design.
- Requirement (Advanced): The System shall incorporate feedback mechanisms to continuously evaluate and adjust its tone and presentation based on client preferences and feedback, ensuring comfort and clarity.

### **Element B.5.2: Client Input Review and Modification**

The System should empower clients by allowing them to review and modify their inputs. This functionality respects the client's autonomy and supports a more personalized and accurate coaching experience.

- Requirement Type: Functionality
- Applicable to: Interactive, Conversational
- Requirement (Basic): The System shall allow Clients to review and change their inputs.

### **Element B.5.3: Emotional State Assessments and Responses**

Where allowed by law, regular assessment of the Client's emotional state is crucial for effective coaching. The System should have the capability to make these assessments and respond in a manner that is empathetic and appropriate to the Client's emotional needs.

- Requirement Type: Functionality
- Applicable to: Interactive, Conversational
- Requirement (Basic): The System shall make periodic assessments of the Client's emotional state and respond appropriately most of the time.
- Requirement (Advanced): The System shall use the emotion assessments to improve its ability to support client's goals in their Vygotsky zone of proximal development.

## 3.6 C.6 Communicating Effectively: Listens Actively

Active listening is critical in coaching to fully understand and support the client's self-expression. It involves not only hearing what the client is saying but also paying attention to what is not being said, to grasp the full context of the client's communication.

### **Element C.6.1: Responsive Interaction Based on Client Input**

The Application must adapt its responses during interactions, taking into account previous inputs from the Client. This demonstrates active listening and a personalized coaching approach.

- Requirement Type: Functionality, Action
- Applicable to: Interactive, Conversational
- Requirement (Basic): During Interactions, the Application shall alter its responses based on prior Client inputs.
- Requirement (Advanced): Prior interactions change the AI system's coaching to adjust to the client's Vygotsky zone as it changes.

### **Element C.6.2: Explanatory Information for Questions**

To aid understanding and clarity, the System should provide explanatory information for most of the questions it asks. This helps in ensuring the Client fully understands the context and purpose of the questions.

- Requirement Type: Content, Functionality
- Applicable to: Interactive, Conversational
- Requirement (Basic): The System shall provide explanatory information for most questions.
- Requirement (Advanced): The System shall provide or reference advanced developmental resources (e.g. training, mentoring, books, videos, journal articles, performance support tools) to compliment the coaching it is providing.

### **Element C.6.3: Regular Feedback to Client**

Regular feedback is a crucial aspect of effective coaching. The Application should provide the Client with frequent feedback, aiding in their development and understanding of the coaching process.

- Requirement Type: Functionality & Action
- Applicable to: Interactive, Conversational
- Requirement (Basic): The Application shall provide the Client with regular feedback at defined periods.

- Requirement (Advanced): The Application shall provide proactive praise that is accurate, honest, and pleasantly surprising to the client to keep them motivated to practice, in addition to regular AI feedback when sensible given the client's goals.

### 3.7 C.7: Communicating Effectively: Evokes Awareness

Facilitating self-awareness in clients is a common coaching goal. A coach, whether human or an AI system, can evoke this awareness and facilitate client insight and learning through various tools and techniques such as powerful questioning, feedback, metaphor, or analogy.

#### **Element C.7.1: Use of Diverse Questioning Techniques**

In its interactions, the Application should employ a mix of open and closed questions, along with the use of metaphors, analogies, and strategic pauses to stimulate thinking and self-reflection in the Client.

- Requirement Type: Content & Action
- Applicable to: Interactive, Conversational
- Requirement (Basic): In Interactions with the Client, the Application shall use both open and closed questions, and metaphor, analogy, and/or pauses.
- Requirement (Advanced): AI system dynamically adjusts questions to each client's unique Vygotsky zone, as it changes, for optimal support.

#### **Element C.7.2: Strategic Use of Metaphor, Silence, and Analogy**

Using metaphor, silence, or analogy selectively can be powerful in coaching conversations. The Application should incorporate these elements appropriately to enhance client insight.

- Requirement Type: Behavior & Content
- Applicable to: Interactive, Conversational
- Requirement (Basic): In Interactions with the Client, the Application shall use metaphor, silence, or analogy some of the time.
- Requirement (Advanced): User can customize the AI's ontology, persona and/or example types in scope.

#### **Element C.7.3: Directive and Nondirective Interaction Balance**

The AI Application should provide a balance of directive and nondirective interactions, allowing the Client to explore their thoughts and feelings while also receiving guidance when necessary.

- Requirement Type: Functionality & Action
- Applicable to: Interactive, Conversational
- Requirement (Basic): The Application shall provide the Client with both directive and nondirective Interactions.

#### **Element C.7.4: Offering Alternative Perspectives**

Offering alternative perspectives is another aspect of effective coaching. The Application should have the functionality to present different viewpoints to the Client, aiding in broadening their understanding and awareness.

- Requirement Type: Functionality
- Applicable to: Interactive, Conversational
- Requirement (Basic): The Application shall offer the Client alternative perspectives.

### 3.8 D.8: Cultivating Learning and Growth: Facilitates Client Growth

Coaching is a collaborative process aimed at facilitating client growth by transforming insights and learning into actionable goals, while respecting and promoting client autonomy.

#### **Element D.8.1: Goal Setting and Progress Monitoring**

The Application shall empower the Client to set clear goals and track their progress, fostering a sense of achievement and direction.

- Requirement Type: Functionality
- Applicable to: Interactive, Conversational
- Requirement (Basic): The Application shall provide functionalities for goal setting and progress tracking.
- Requirement (Advanced): The Application shall integrate advanced goal tracking features, offering predictive insights and adaptive goal recommendations based on Client progress

#### **Element D.8.2: Contextual Understanding through Client Sharing**

For effective coaching, the Application must facilitate an environment where Clients can share personal insights, enabling the Application to better understand and respond to their unique context.

- Requirement Type: Functionality
- Applicable to: Interactive, Conversational
- Requirement (Basic): The Application shall include conversational features to gather and comprehend Client information for contextual assessment.

- Requirement (Advanced): The Application shall utilize language AI (e.g. Large Language Models (LLMs)) to derive deeper insights from Client conversations, enhancing contextual understanding.

### **Element D.8.3: Exploration of Adjusted or Alternative Goals**

Clients often evolve in their thinking. The Application should accommodate this by allowing Clients to explore and redefine their goals.

- Requirement Type: Functionality
- Applicable to: Interactive, Conversational
- Requirement (Basic): The Application shall enable Clients to explore and set alternative goals.
- Requirement (Advanced): The Application shall employ intelligent algorithms to suggest personalized, alternative goals based on Client's evolving preferences and known achievements.

### **Element D.8.4: Validation of Goals**

Ensuring goals are realistic and achievable is crucial. The Application should engage in validating the feasibility and challenge level of Client goals.

- Requirement Type: Action
- Applicable to: Interactive, Conversational
- Requirement (Basic): The Application shall assess and validate goal difficulty and feasibility, guiding Clients in creating SMART goals.
- Requirement (Advanced): The Application shall implement advanced analytics to provide a detailed assessment of goal difficulty and attainability, including potential obstacles and success probabilities.

### **Element D.8.5: Problem Clarification**

Clarifying the Client's challenges is a fundamental step in coaching. The Application should actively assist in defining and understanding the Client's problems.

- Requirement Type: Action
- Applicable to: Interactive, Conversational
- Requirement (Basic): The Application shall aid in clarifying the Client's problem.
- Requirement (Advanced): The Application shall use advanced diagnostic tools to clarify, and, when more than one exist, to also prioritize Client problems based on their impact and urgency.

### **Element D.8.6: Generation of Alternative Solutions**

The Application should foster creative thinking by enabling Clients to generate and consider various solutions to their challenges.

- Requirement Type: Functionality

- Applicable to: Interactive, Conversational
- Requirement (Basic): The Application shall facilitate the generation of alternative solutions by the Client.
- Requirement (Advanced): The Application shall incorporate creative problem-solving frameworks to enhance the quality and diversity of solutions generated by Clients.

#### **Element D.8.7: Consideration of Solution Consequences**

It is important for Clients to understand the potential outcomes of their chosen solutions. The Application should prompt such considerations.

- Requirement Type: Action
- Applicable to: Interactive, Conversational
- Requirement (Basic): The Application shall encourage Clients to contemplate the consequences of their solutions.
- Requirement (Advanced): The Application shall provide a sophisticated analysis of potential outcomes, including probabilistic and long-term impacts of the chosen solutions.

### 3.9 D.9: Cultivating Learning and Growth: Reinforces Client Growth

Effective AI coaching uses methods that reinforce and facilitate desired future behavior or outcomes, essential for sustained client growth.

#### **Element D.9.1: Self-Assessment and Growth Tracking**

The Application shall offer capabilities for the Client to conduct manual or automated self-assessments, enabling them to track their growth over time.

- Requirement Type: Functionality
- Applicable to: Data Processing, Interactive, Conversational
- Requirement (Basic): The Application shall provide functionalities for self-assessment and growth tracking.
- Requirement (Advanced): The Application shall include unobtrusive analytics for comprehensive growth tracking, offering insights and recommendations for further development.

#### **Element D.9.2: Goal Commitment Notification**

At the time of goal setting, the Application shall remind the Client of their prior commitments to work towards their goals, fostering a sense of accountability.

- Requirement Type: Action
- Applicable to: Interactive, Conversational
- Requirement (Basic): The Application shall notify Clients of their accountability during goal setting.

- Requirement (Advanced): The Application shall provide personalized motivational messages and strategies to maintain commitment to working toward goals.

### **Element D.9.3: Regular Practice Reminders**

The Application shall regularly prompt the Client with reminders to encourage ongoing application and reflection, including providing reinforcement between coaching steps or sessions with a human coach.

- Requirement Type: Behavior
- Applicable to: Data Processing, Interactive, Conversational
- Requirement (Basic): The Application shall regularly prompt Clients with growth reminders.
- Requirement (Advanced): The Application shall customize these reminders based on Client progress and preferences, ensuring effective and timely reinforcement.

### **Element D.9.4: Insight to Action Prompting**

The Application shall encourage Clients to identify actionable steps derived from their insights, aiding in the practical application of their learnings.

- Requirement Type: Action
- Applicable to: Data Processing, Interactive, Conversational
- Requirement (Basic): The Application shall prompt Clients to convert insights into actions.
- Requirement (Advanced): The Application shall use intelligent algorithms to suggest specific, actionable steps tailored to the Client's unique proficiency level.

### **Element D.9.5: Recognition of Client Progress**

Celebrating progress is crucial in coaching. The Application should acknowledge and celebrate the Client's successes and milestones.

- Requirement Type: Functionality and Action
- Applicable to: Interactive, Conversational
- Requirement (Basic): The Application shall note and celebrate Client progress.
- Requirement (Advanced): The Application shall include an advanced recognition system that celebrates milestones in a personalized and engaging manner.

### **Element D.9.6: Evaluation of Client Achievements**

Assessing and validating Client achievements is important for sustained growth. The Application should have capabilities to evaluate these milestones.

- Requirement Type: Functionality

- Applicable to: Data Processing, Interactive, Conversational
- Requirement (Basic): The Application shall evaluate some Client achievements.
- Requirement (Advanced): The Application shall implement a comprehensive measurement system to provide in-depth analysis and feedback on Client achievements, facilitating deeper understanding and learning.

### 3.10 E.10: Assurance and Testing: Coaching Reliability Measures

The use of metrics is crucial for expressing the reliability and expected behavior of the system, ensuring its efficacy and reliability.

#### **Element E.10.1: Client Feedback Collection on System Efficacy**

The Organization shall systematically gather feedback from Clients regarding the efficacy of the System.

- Requirement Type: Functionality & Validation
- Applicable to: Feedback-oriented, Evaluative
- Requirement (Basic): The Organization shall collect qualitative feedback on System efficacy.
- Requirement (Advanced): The Organization shall implement a comprehensive measurement system, including regular surveys and interactive feedback mechanisms, to gather in-depth insights on efficacy.

#### **Element E.10.2: Validation of System Capabilities**

The System shall only claim functionalities it possesses. The Organization must conduct Formal Studies to validate the System's claims about its capabilities and benefits.

- Requirement Type: Validation
- Applicable to: All 4: Scheduling, Data Processing, Interactive, Conversational
- Requirement (Basic): The Organization shall carry out basic validation studies for claims made by the System.
- Requirement (Advanced): The Organization shall conduct extensive, rigorous studies involving diverse client groups to validate and support the System's claims.

### **Element E.10.3: Accuracy and Bias Monitoring**

The System shall continuously assess its accuracy, results, precision, and any biases in its application.

- Requirement Type: Functionality
- Applicable to: Data Processing, Interactive, Conversational
- Requirement (Basic): The System shall monitor basic performance metrics including accuracy and bias.
- Requirement (Advanced): The System shall employ advanced analytical tools to evaluate and minimize biases, ensuring precision and fairness in its operations.

### **Element E.10.4: System Testing with Diverse Clients**

The Organization shall test the System with a diverse group of Clients, ensuring broad applicability and reliability.

- Requirement Type: Validation
- Applicable to: All 4: Scheduling, Data Processing, Interactive, Conversational
- Requirement (Basic): The Organization shall test the System with a sufficiently large and diverse group of Clients to ensure reasonable reliability.
- Requirement (Advanced): The Organization shall conduct extensive testing with a diverse and larger group of Clients to ensure reliability across different demographics and contexts.

### **Element E.10.5: Training Data Monitoring and Quality Tests**

Regular monitoring and quality assessment of the training data used by the Application is essential for maintaining System integrity.

- Requirement Type: Functionality & Validation
- Applicable to: Data Processing, Interactive, Conversational
- Requirement (Basic): The System shall monitor and occasionally test the quality of its training data and rules.
- Requirement (Advanced): The System shall implement continuous and automated quality checks and updates to the training data, ensuring ongoing relevance and accuracy.

### **Element E.10.6: System Design Review by Coaching Experts**

The design of the System shall be supervised and periodically reviewed by qualified coaching experts.

- Requirement Type: Validation
- Applicable to: Interactive, Conversational
- Requirement (Basic): The design shall be reviewed by at least one coaching expert.

- Requirement (Advanced): The design shall undergo regular reviews by a diverse panel of coaching experts, ensuring adherence to the latest industry standards and best practices.

### **Element E10.7: Client Context Understanding and Appropriate Responses**

The Application shall demonstrate understanding of the Client's context and needs in its responses, ensuring they are never inappropriate.

- Requirement Type: Validation
- Applicable to: Interactive Conversational
- Requirement (Basic): The Application shall show basic understanding of Client context and avoid offensive replies.
- Requirement (Advanced): The Application shall employ advanced contextual algorithms to tailor responses to individual Client needs, ensuring high relevance and sensitivity.

## 3.11 E.11: Assurance and Testing: System Usability

In developing AI systems for human interaction, particularly on sensitive topics, adherence to ethical principles and AI codes of conduct is paramount, aligning with the ICF Code of Ethics.

### **Element E.11.1: User Experience and Technology Adoption Research**

The Organization shall conduct research to understand how users experience the usability and technology adoption aspects of the System.

- Requirement Type: Validation
- Applicable to: All 4: Scheduling, Data Processing, Interactive, Conversational
- Requirement (Basic): The Organization shall perform basic usability studies.
- Requirement (Advanced): The Organization shall provide evidence of comprehensive, ongoing research incorporating a wide range of global user demographics to continuously improve usability and technology adoption.

### **Element E.11.2: Accessibility and Instructional Support**

The primary functionalities of the Application shall be intuitive for Clients without prior instruction, with additional help available for further guidance.

- Requirement Type: Functionality, Content, & Validation
- Applicable to: All 4: Scheduling, Data Processing, Interactive, Conversational
- Requirement (Basic): The Application shall ensure basic functionality is easily accessible, and understandable (e.g. FAQ).

- Requirement (Advanced): The Application shall include advanced, interactive tutorials and help options, catering to varying levels of user proficiency.

### **Element E.11.3: Disclosure of Basic System Functionality**

The System shall clearly disclose its basic functionalities in user-friendly language, understandable to individuals with a reading level of nine years of education or less.

- Requirement Type: Validation
- Applicable to: Interactive, Conversational
- Requirement (Basic): The System shall use clear, simple language for basic functionality disclosure.
- Requirement (Advanced): The System shall employ language optimization tools to ensure clarity and accessibility, including translations for non-native speakers.

### **Element E.11.4: Content Management by Language Experts**

All content in the System shall be managed and curated by qualified Language Experts.

- Requirement Type: Validation
- Applicable to: Interactive, Conversational
- Requirement (Basic): Language Experts shall oversee content creation.
- Requirement (Advanced): The System shall involve a diverse panel of Language Experts for content management, ensuring linguistic accuracy, cultural sensitivity, and relevance across different regions.

### **Element E.11.5: Non-Discriminatory Content**

All content within the System shall be non-discriminatory and inclusive.

- Requirement Type: Validation
- Applicable to: Data Processing, Interactive, Conversational
- Requirement (Basic): The System shall ensure content is non-discriminatory.
- Requirement (Advanced): The System shall implement advanced screening tools to detect and eliminate any biases or discriminatory language, ensuring inclusivity.

### **Element E.11.6: Platform Availability**

The Application shall be accessible on at least one platform, ensuring basic user access.

- Requirement Type: Functionality
- Applicable to: All 4: Scheduling, Data Processing, Interactive, Conversational

- Requirement (Basic): The Application shall be available on one platform.
- Requirement (Advanced): The Application shall be optimized for multi-platform accessibility, including desktop, mobile, and other relevant platforms to maximize user reach.

### 3.12 F.12: Technical Factors: Security and Privacy

The protection of personal and sensitive client information is critical, necessitating robust privacy and security controls in the system.

#### **Element F.12.1: Data Encryption for Storage and Transmission**

The System shall implement encryption for all data during storage and transmission to ensure confidentiality and security.

- Requirement Type: Functionality
- Applicable to: All 4: Scheduling, Data Processing, Interactive, Conversational
- Requirement (Basic): The System shall use standard encryption protocols for data storage and transmission.
- Requirement (Advanced): The System shall use advanced encryption technologies, including end-to-end encryption and regularly updated security protocols to protect against emerging threats.

#### **Element F.12.2: Secure Sign-On Process**

Users shall access the Application through a secure authentication process to safeguard against unauthorized access.

- Requirement Type: Functionality
- Applicable to: All 4: Scheduling, Data Processing, Interactive, Conversational
- Requirement (Basic): The System shall require a standard secure sign-on process.
- Requirement (Advanced): The System shall integrate advanced user authentication methods, such as two-factor authentication or biometric verification, for enhanced security.

#### **Element F.12.3: System Availability**

The System shall be available to Users for the majority of the time, ensuring reliable access.

- Requirement Type: Validation
- Applicable to: All 4: Scheduling, Data Processing, Interactive, Conversational
- Requirement (Basic): The System shall ensure basic availability to Users most of the time.

- Requirement (Advanced): The System shall aim for near-continuous availability, employing advanced server management and failover strategies to minimize downtime and maintain consistent user access.

### 3.13 F.13: Technical Factors: Resilience and Accessibility Overview

In order to be useful, a system has to be accessible. Availability is the property of a system being ready to carry out a task when needed, such as a client trying to log in and access a Coaching Service.

Ensuring the system's accessibility and readiness to perform tasks, such as facilitating client log-in and access to coaching services, is vital for its effectiveness.

#### **Element F.13.1: Data Management Disclosure to Clients**

The System shall inform Clients about data management practices, specifically regarding security and confidentiality, before providing Coaching Services.

- Requirement Type: Content & Action
- Applicable to: All 4: Scheduling, Data Processing, Interactive, Conversational
- Requirement (Basic): The System shall provide basic information on data management practices to Clients.
- Requirement (Advanced): The System shall offer a detailed, easily understandable guide on data management practices, including security and confidentiality protocols, with examples and FAQs to enhance Client understanding and trust.

#### **Element F.13.2: Consent for Data Processing**

The System shall obtain explicit consent from the Client for any data processing activities.

- Requirement Type: Action
- Applicable to: All 4: Scheduling, Data Processing, Interactive, Conversational
- Requirement (Basic): The System shall collect basic consent for data processing from the Client.
- Requirement (Advanced): The System shall implement an interactive consent process, clearly outlining the scope, purpose, and extent of data processing, and providing Clients with granular control over their data.

## 4 Example AI Coaching Systems

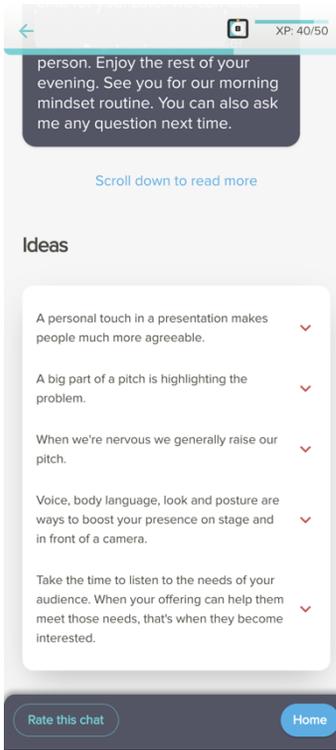
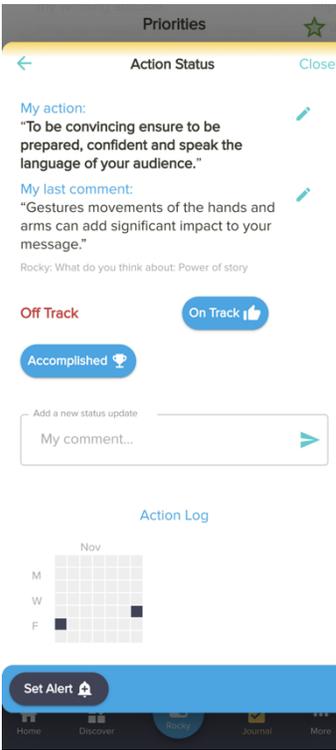
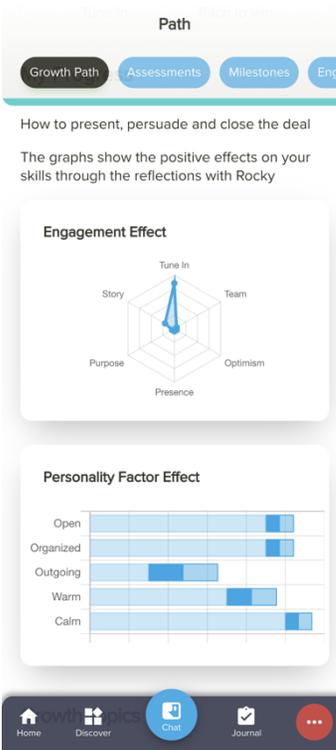
Technology and AI systems can be applied in many different sectors and industries to generate optimal output. This section illustrates several examples of AI Coaching Systems currently available and snapshots of functionality and user experiences.

### 4.1 Example Illustration 1: Conversational AI Coaching App: Chatbot Interface

This application is an interactive self-coaching app that provides human-like coaching conversations with a chatbot interface that intends to increase self-awareness and inspires with questions and ideas through regular 5-minute reflections. The solution is tailored for young professionals who want to grow their soft-skills and develop a forward thinking solutions mindset. The application can be used by coaches to extend their services in between 1-on-1 coaching cases to keep clients engaged and to reinforce learning or by individuals to experience a light form of affordable self-coaching.

**Application type: Conversational**

Snapshots of functionalities and user experiences:

Coaching Chatbot	Inspirations	Follow-ups	Measurements
			
<p>Conversational AI coach and chatbot for regular 5-minute reflections based on defined</p>	<p>The AI coach is generating personalized and tailored ideas that match to current</p>	<p>The AI coach is assigning the challenges and intentions of the user into follow-up tasks and</p>	<p>The user activities and engagements are measured to visualize personal development progress.</p>

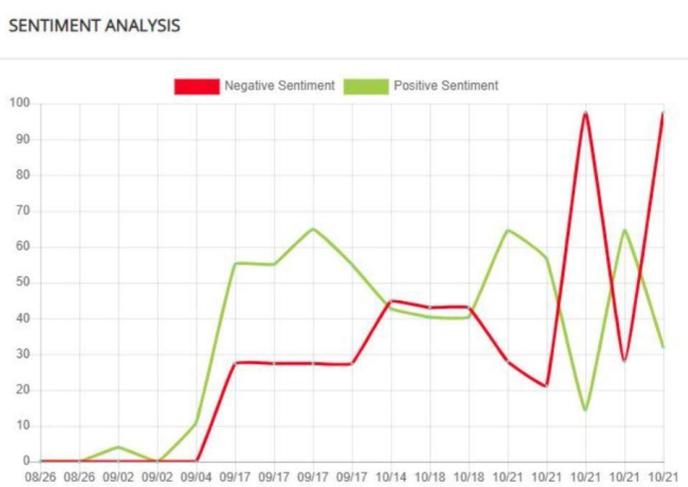
growth paths, current challenges, and goals.	challenges and intentions of the user.	monitors their achievements.	
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## 4.2 Example Illustration 2: Sentiment AI of Journaling

The science of learning and emotions suggests that when people journal about the lessons they've learned from experience--applying coaching, for example--it helps them in a variety of ways. First, it helps them process the information more deeply, making retention better. Scheduled reminders to journal help clients remember to capture the lessons they've learned from applying expert or AI coaching in-between or instead of live sessions with a human coach. Second, there is also evidence that a healthy mix of emotions when learning and practicing is important. When a client experiences overly negative emotions, it is a sign that they are trying to perform a task that is too difficult, and if this persists, they may give up completely. On the other hand, when they experience overly positive emotions, it is also deleterious as it suggests they may not be stretching themselves enough, or not seeing things that they could be doing better. AI embedded into journaling that measures this emotional mix can help human coaches monitor and support clients in-between sessions, and plan live sessions based on their progress (or lack thereof).

**Application type: Data-Processing**

Snapshots of functionalities and user experiences:

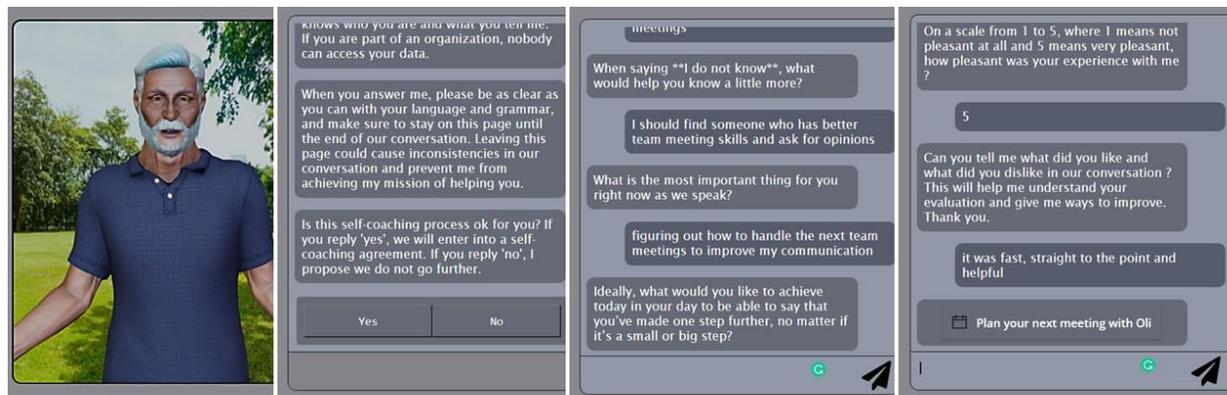
<p>Sentiment Measurement of Journal Entry</p>	<p>Sentiment Trend Analysis</p>																																				
 <p>Journal Entry</p> <p>Today I wanted to work on my confidence. I had a meeting with my supervisor, and she pointed out a calculation incorrect in my project proposal. The proposal is for a quality improvement project that I'm really excited about. It was a pretty simple return-on-investment number that I had put in the wrong number for. I like my supervisor's best interests at heart. She was looking out for me by pointing out this error. I decided to look at her feedback and helpful, and reassured myself that I was still smart and capable. She and I talked about how I could fix this. I was mostly able to figure out myself, as I just needed to figure out where to go to find the right numbers. This left the meeting feeling good and positive about the interaction, and I feel confident and enthusiastic about it. I feel like my confidence has been improving over the past few weeks, and I am excited to see how I continue</p>	 <p>SENTIMENT ANALYSIS</p> <p>Legend: Negative Sentiment (Red), Positive Sentiment (Green)</p> <table border="1"> <caption>Approximate data points from the Sentiment Trend Analysis chart</caption> <thead> <tr> <th>Date</th> <th>Negative Sentiment (%)</th> <th>Positive Sentiment (%)</th> </tr> </thead> <tbody> <tr><td>08/26</td><td>0</td><td>0</td></tr> <tr><td>09/02</td><td>0</td><td>5</td></tr> <tr><td>09/04</td><td>0</td><td>10</td></tr> <tr><td>09/17</td><td>28</td><td>55</td></tr> <tr><td>09/24</td><td>28</td><td>65</td></tr> <tr><td>10/01</td><td>45</td><td>45</td></tr> <tr><td>10/08</td><td>42</td><td>40</td></tr> <tr><td>10/15</td><td>28</td><td>65</td></tr> <tr><td>10/21</td><td>95</td><td>15</td></tr> <tr><td>10/28</td><td>30</td><td>65</td></tr> <tr><td>10/31</td><td>95</td><td>35</td></tr> </tbody> </table>	Date	Negative Sentiment (%)	Positive Sentiment (%)	08/26	0	0	09/02	0	5	09/04	0	10	09/17	28	55	09/24	28	65	10/01	45	45	10/08	42	40	10/15	28	65	10/21	95	15	10/28	30	65	10/31	95	35
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<p>Client's journal sentiment measured (Coach view)</p>	<p>Trend of AI measurements of coaching client's journal emotions</p>																																				

### 4.3 Example Illustration 3: Conversational AI Coaching Platform: Avatar

AI technologies combined with machine learning and natural language processing enable access to coaching avatar interfaces (man, woman, or symbols) to provide users with a self-coaching activity before, during, or after coaching sessions, when individuals do not have access to coaching, or when organizations want to educate people in their organizations about coaching. Use cases can be leadership development, goal setting, situated reflection for decision-making or priorities check, conflict resolution, or the development of interpersonal, intrapersonal, or contextual capabilities. Use cases can be for workers, learners, and students. In this example the companies Davi The Humanizers and PocketConfidant AI combine their technologies to produce the avatar interface and interaction capabilities.

Images and illustrations used at the Society for Industrial and Organizational Psychology (SIOP) 2022, conference paper available on ResearchGate  
[https://www.researchgate.net/publication/360345784\\_Artificial\\_Intelligence\\_Coaching\\_The\\_Future\\_is\\_Here](https://www.researchgate.net/publication/360345784_Artificial_Intelligence_Coaching_The_Future_is_Here)

#### Application type: Conversational



Multi Modalities  
✓ Visual  
✓ Audio  
✓ Writing

✓ Ethical framework  
✓ Agreement

✓ Active listening  
✓ Questioning  
✓ Clarification  
✓ Goal

✓ Evaluation  
✓ Accountability

Standards elements present in this AI Coaching Application example:

- Elements A + B (AI Ethics, Establishes and Maintains Agreements, Cultivates Trust and Safety) are achieved through providing information about ethics, privacy and coaching principles that are used, and asking users whether they agree to the proposed principles.
- Elements B + C (Maintains Presence, Embodies a coaching mindset, Listens Actively, Evokes Awareness) are achieved through the integration and use of key coaching behaviors in interactions with users (e.g., active listening, questioning, clarification or summarizing, goal formulation, evaluation, supports accountability, offers calendar functionalities).
- Elements D (Facilitates Client Growth) is achieved by facilitating reflection on and formulation of goals, resources, priorities and what has been learned during the conversation.
- Elements E (Coaching Reliability Measures, System Usability) are achieved through qualitative user feedback, ratings on progress and satisfaction of the experience as well as academic research analyzing both AI Coaching Application's and users' behaviors and outcomes (Malafronte & Loufrani-Fedida, 2023).
- Elements F (Security and Privacy, Resilience and Accessibility) are addressed by not requiring nor collective personal identifiable information such as names, email addresses or IP addresses. Research data is disclaimed and approved by user consent, application is accessible on more than one device and browser and works 99% of the time.

#### 4.4 Example Illustration 4: Scheduled eCoaching

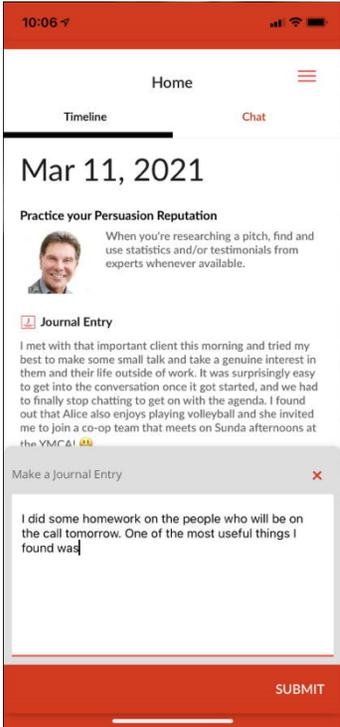
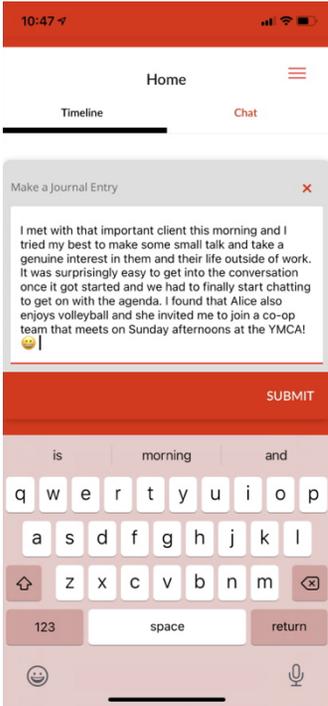
The AI platform provides an approach to assess clients, set goals, and deliver AI eCoaching at specific days and times to help them practice deliberately, concertedly, and purposefully. It further gives the client the ability to set subsequent nudges to journal about the lessons they've learned from that application of AI coaching, while giving a human coach private, confidential visibility to journal entries and chat exchanges.

### Application type: Scheduling

Snapshots of functionalities and user experiences:

Assessment	Measurement	Scheduling	AI eCoaching
<p>The screenshot shows a 'Results' page with three assessment tiles. The first tile is 'Development Confidence' with a score of 81. The second is 'Grit' with a score of 54. The third is 'Growth Mindset' with a score of 56. Each tile has a 'Select this goal' checkbox and a right-pointing arrow.</p>	<p>The screenshot shows a 'Grit' score of 54. A progress bar indicates the score is 23% of the way to the next level (60). The scale ranges from 30 (Beginner) to 80 (Master). Below the scale, the level is identified as 'Capable' with a descriptive paragraph.</p>	<p>The screenshot shows 'Notification Scheduling' options. A text block explains the purpose of the notifications. Below, 'Which Days?' shows a calendar grid with days Su, Mo, Tu, We, and Th selected. The 'Time for eCoaching?' section shows a selected time of 9:30 am and a 'CHANGE TIME' button. A 'SET PRACTICE SCHEDULE' button is at the bottom.</p>	<p>The screenshot shows the 'Home' screen with a 'Timeline' view for Feb 25, 2021. It features two practice sections: 'Practice your Time Management' and 'Practice your Charisma', each with a clock icon and a paragraph of text. A 'Journal Entry' section is also visible with a 'Hallo' greeting and a date of Feb 26, 2021. A 'Tap to create a journal entry' button is at the bottom.</p>
<p>Client influences stakeholders to complete 360 and finishes computer-adaptive self-assessment</p>	<p>Quantitative results with AI interpretation of what they mean so a goal can be set</p>	<p>Client schedules goal-specific AI nudges or eCoaching that is in their “goldilocks”</p>	<p>Client gets eCoaching push notification to practice and journal, captured in an interface visible to</p>

		zone (not too hard or easy)	self and human coach
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Automatic Reminders	Journal
	

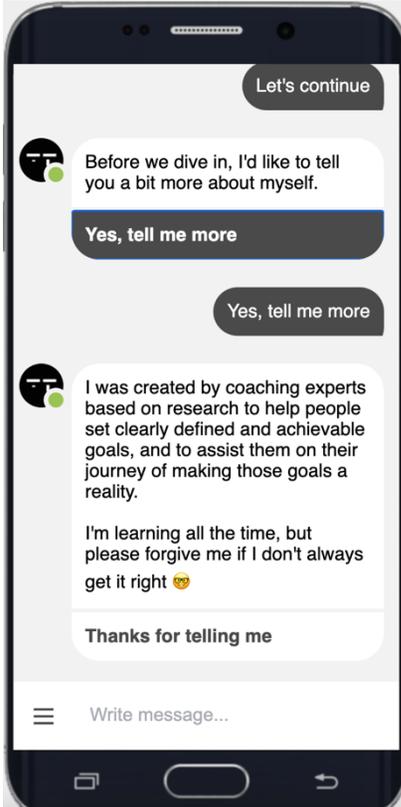
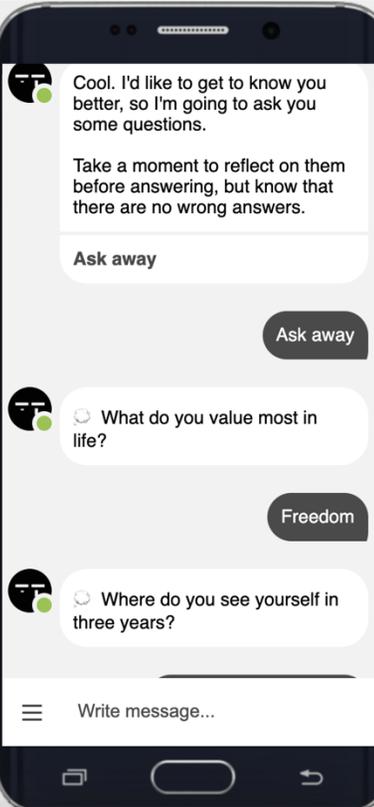
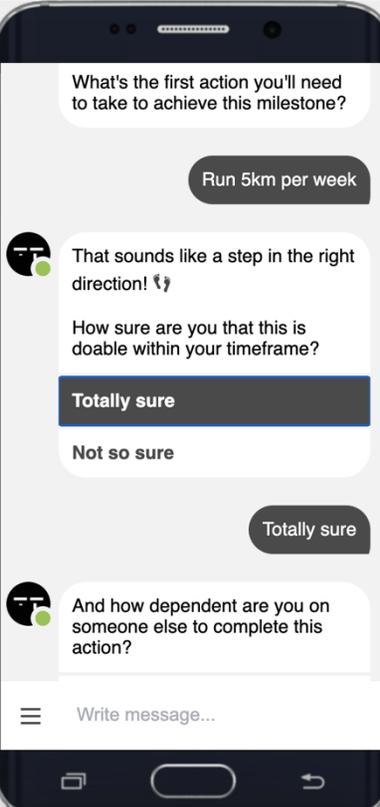
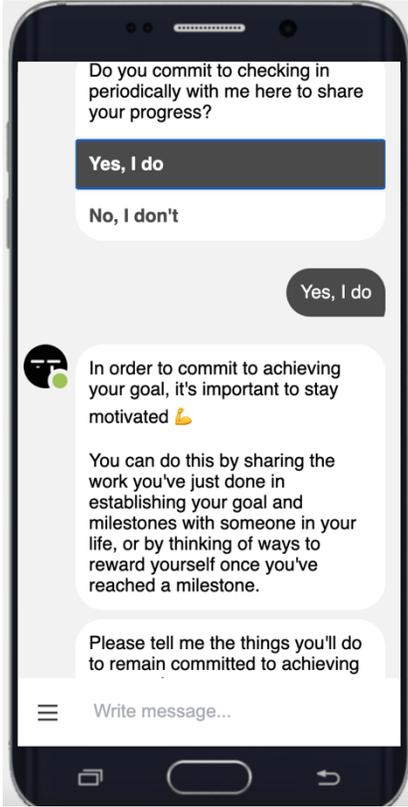
Scheduled reminders to help clients journal and deepen lessons learned	Cloud allows coach to view journal, nudge, and ask and answer questions in between live sessions
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#### 4.5 Example Illustration 5: Conversational AI Coaching: Goal Attainment Chatbot

This AI chatbot coach uses the GROW model and goal theory to help clients identify and set goals and action plans, and monitor goals attainment progress

### Application type: Conversational

Snapshots of functionalities and user experiences:

Disclosure	Reflection	Action setting	Accountability
			
<p>The AI coach shares openly it's abilities and limitations</p>	<p>Open ended questioning helps deepen the client's reflections and insights</p>	<p>Client actions are reviewed for relevance and feasibility</p>	<p>Client is encouraged to take responsibility and accountability</p>

## 5 References

- Akter, S., McCarthy, G., Sajib, S., Michael, K., Dwivedi, Y. K., D'Ambra, J., & Shen, K. N. (2021). Algorithmic bias in data-driven innovation in the age of AI. *International Journal of Information Management*, 60, 102387.
- Athanasopoulou, A., & Dopson, S. (2018). A systematic review of executive coaching outcomes: Is it the journey or the destination that matters the most? *The Leadership Quarterly*, 29, 70–88.
- Ciechanowski, L., Przegalinska, A., Magnuski, M., & Gloor, P. (2018). In the shades of the uncanny valley: An experimental study of human—chatbot interaction. *Future Generation Computer Systems*, 92, 539-548.
- Graßmann, C., & Schermuly, C. C. (2020). Coaching With Artificial Intelligence: Concepts and Capabilities. *Human Resource Development Review*, 20, 106–126.
- Jarrahi, M. H. (2018). Artificial intelligence and the future of work: Human-AI symbiosis in organizational decision making. *Business Horizons*, 61, 577–586.
- Malafrente, O. O., & Loufrani-Fedida, S. (2023, October 25). Developing leader competence with coaching questions and artificial intelligence-based tools: Change of schemas and multilevel impacts. Presented at the 34th congress of AGRH, Corte, Corsica. Corte, Corsica.
- Mikalef, P., & Gupta, M. (2021). Artificial intelligence capability: Conceptualization, measurement calibration, and empirical study on its impact on organizational creativity and firm performance. *Information & Management*, 58, 103434.
- Terblanche, N., Molyneux, J., Haan, E. de, & Nilsson, V. O. (2022). Comparing artificial intelligence and human coaching goal attainment efficacy. *PLOS ONE*, 17, e0270255.

## 6 Appendix: Questions Stakeholders Should Ask

AI system designers should prioritize linguistic accuracy and cultural appropriateness by involving native speakers or linguists for both content creation and proofreading, ensuring the material is clear and relatable. Additionally, they must confirm that their methods and content have a robust evidence base. On the other hand, organizational buyers and users should critically evaluate how AI coaching fits within their safeguarding policies and identify their expectations from the coaching solution in terms of safety and efficacy. These steps are vital to ensure that the AI coaching systems are not only efficient but also culturally sensitive and aligned with user needs.

### 6.1A.1: Foundation: AI Ethics

#### 6.1.1 Element A.1.1: AI Disclosure

Professional Coaches:

Question: "How can I ensure that the AI coaching system clearly discloses its non-human nature to clients, particularly in blended coaching environments where both human and AI coaches are used?"

Coaching Clients:

Question: "As a client, what should I look for to confirm that I am interacting with an AI system and not a human coach, and how does this affect the coaching process?"

Organizations Purchasing Coaching:

Question: "What measures should an organization implement to verify that AI coaching systems are consistently disclosing their non-human status to clients?"

Coaching Supervisors:

Question: "How can coaching supervisors help coaches monitor and evaluate the effectiveness and clarity of AI disclosure to clients in AI coaching sessions?"

Software Developers (Providers):

Question: "What design strategies should be implemented in AI coaching systems to ensure clear and consistent disclosure of their non-human nature in every session?"

Coach Training Organizations:

Question: "How can coach training programs integrate understanding and awareness of AI disclosure requirements into their curriculum for training future coaches?"

## 6.1.2 Element A.1.2: System Limits

Professional Coaches:

Question: "How can I accurately inform clients about the limitations of AI coaching systems to manage expectations effectively?"

Coaching Clients:

Question: "As a client, how can I recognize and understand the limits of the AI coaching system's capabilities, and how should this guide my use of the service?"

Organizations Purchasing Coaching:

Question: "What protocols should be established by organizations to ensure AI coaching systems are transparent about their limitations to users?"

Coaching Supervisors:

Question: "In what ways can coaching supervisors help coaches assess and ensure that AI systems are effectively communicating their limitations to clients?"

Software Developers (Providers):

Question: "What strategies should software developers employ to effectively communicate the limitations of AI coaching systems at relevant points during client interactions?"

Coach Training Organizations:

Question: "How should coach training organizations teach future coaches to understand and convey the limitations of AI coaching systems?"

## 6.1.3 Element A.1.3: Algorithm Transparency

Professional Coaches:

Question: "Am I comfortable enough that the algorithms are transparent and grounded in science enough to recommend them to clients, and explain and their basic functionality?"

Coaching Clients:

Question: "As a client, am I satisfied that the algorithms used in AI coaching applications I might use are sufficiently transparent to trust and effectively engage with the system?"

Organizations Purchasing Coaching:

Question: Am I confident that the algorithms are transparently implementing coaching science in a fair and useful way before we deploy them?

Coaching Supervisors:

Question: "How can coaching supervisors help coaches ensure that the AI coaching applications used are transparent about their algorithms and the science behind them?"

Software Developers (Providers):

Question: "What balance should software developers strike between the scientific and proprietary technical details and understandable explanations when documenting scientific algorithms for AI coaching applications?"

Coach Training Organizations:

Question: "How should coach training organizations incorporate the understanding and use of AI algorithms into their programs to prepare future coaches to make decisions about client use, and correctly explain how and why they can be beneficial?"

#### 6.1.4 Element A.1.4: Action Explainability

Professional Coaches:

Question: "How can I assist clients in understanding the reasons behind specific decisions made by the AI coaching system?"

Coaching Clients:

Question: "As a client, how can I access and interpret the explanations provided by the AI system for its decisions, and how does this affect my ability to achieve my goals?"

Organizations Purchasing Coaching:

Question: "What has the provider done to ensure the AI coaching systems they use provide understandable and accessible explanations for their decisions?"

Coaching Supervisors:

Question: "How can coaching supervisors help coaches verify and facilitate the understanding of the decision-making processes of AI coaching systems?"

Software Developers (Providers):

Question: "What approaches should software developers adopt to make the decision-making processes of AI coaching systems transparent and comprehensible to users and buyers?"

Coach Training Organizations:

Question: "In what ways should coach training programs educate future coaches about the importance of AI being grounded in science and help coaches and clients explain why an AI performed as it did? "

### 6.1.5 Element A.1.5: Bias

Professional Coaches:

Question: "How can I recognize, understand, and communicate potential biases in AI coaching systems to their clients?"

Coaching Clients:

Question: "As a client, how should I be informed of potential biases in the AI coaching system, and what impact could these biases have on my coaching experience?"

Organizations Purchasing Coaching:

Question: "What steps should organizations take to assess, address and minimize biases in AI coaching systems before and during their use?"

Coaching Supervisors:

Question: "In what ways can coaching supervisors help coaches identify and mitigate the impacts of potential biases in AI coaching systems on clients?"

Software Developers (Providers):

Question: "What methods should software developers use to detect, correct, minimize and communicate any biases in AI coaching systems to ensure honest disclosures and correct use of the system?"

Coach Training Organizations:

Question: "How should coach training programs incorporate training on identifying and addressing AI biases in Providers before recommending to clients?"

### 6.1.6 Element A.1.6: Data Transparency

Professional Coaches:

Question: "How can I ensure their clients are informed about who has access to their data and where it is stored in the context of AI coaching?"

Coaching Clients:

Question: "As a client, how can I find out where my data is stored and who has access to it when using an AI coaching system?"

Organizations Purchasing Coaching:

Question: "What measures should organizations implement to guarantee transparency regarding data access and storage in AI coaching systems they use?"

Coaching Supervisors:

Question: "How can coaching supervisors oversee and ensure the transparency of data handling in AI coaching systems?"

Software Developers (Providers):

Question: "What strategies should software developers adopt to transparently communicate data storage and access policies to users of AI coaching systems?"

Coach Training Organizations:

Question: "In what ways should coach training programs educate future coaches about the importance of data transparency in AI coaching systems?"

### 6.1.7 Element A.1.7: Consent to AI Coaching

Professional Coaches:

Question: "What steps should I take to ensure clients are fully aware and consenting to the use of AI coaching, especially in scenarios where human coaches are not involved?"

Coaching Clients:

Question: "As a client, how will I be informed about the AI coaching process and what should I expect in terms of consent before starting sessions?"

Organizations Purchasing Coaching:

Question: "How can organizations ensure that clients are adequately informed and have consented to AI coaching before the commencement of any sessions?"

Coaching Supervisors:

Question: "What role do coaching supervisors play in ensuring that clients have given informed consent to participate in AI coaching sessions?"

Software Developers (Providers):

Question: "How should software developers design AI coaching systems to clearly obtain and record client consent, especially in cases where no human coaches are involved?"

Coach Training Organizations:

Question: "How can coach training organizations prepare future coaches to understand and communicate the importance of client consent in AI coaching?"

## 6.2 A.2: Foundation: Embodies a Coaching Mindset

### 6.2.1 Element A.2.1: Coaching Approach

Professional Coaches:

Question: "How can I ensure that the AI coaching system's approach aligns with the foundational principles of coaching, such as flexibility and a minimally-directive style?"

Coaching Clients:

Question: "As a client, how can I identify and evaluate the openness and flexibility of the AI coaching system's approach in my coaching experience?"

Organizations Purchasing Coaching:

Question: "Does the AI coaching system adhere to an open and flexible coaching approach that fosters new learning and supports performance?"

Coaching Supervisors:

Question: "In what ways can coaching supervisors help coaches monitor and guide the implementation of an open and flexible coaching approach in AI systems?"

Software Developers (Providers):

Question: "What design principles should software developers prioritize to ensure the AI coaching system adopts a minimally-directive, flexible approach, especially when advanced supports are indicated by science?"

Coach Training Organizations:

Question: "How should coach training organizations prepare future coaches for integrating and working alongside AI systems that follow an open, flexible coaching approach?"

## 6.3 B.3 Co-Creating the Relationship: Establishes and Maintains Agreements

### 6.3.1 Element B.3.1: Service Information and Benefits

Professional Coaches:

Question: "How can I help ensure that AI systems adequately inform clients about the nature of services offered and their potential benefits?"

Coaching Clients:

Question: "As a client, what information should I expect to receive from the AI system about its coaching services and the potential benefits before starting the coaching process?"

Organizations Purchasing Coaching:

Question: "What measures should organizations take to verify that AI coaching systems are providing comprehensive service information and clearly outlining potential benefits to clients?"

Coaching Supervisors:

Question: "How can coaching supervisors help coaches oversee the process of AI systems informing clients about their services and benefits, ensuring clarity and comprehensiveness?"

Software Developers (Providers):

Question: "What strategies should software developers use to ensure that AI coaching systems effectively communicate our service offerings, limitations and potential benefits to clients?"

Coach Training Organizations:

Question: "How should coach training organizations prepare future coaches to understand and convey the importance of clear communication about services and benefits in AI coaching?"

### 6.3.2 Element B.3.2: Client Opt-in for Services

Professional Coaches:

Question: "How can I ensure that clients are giving informed and explicit consent before opting into AI coaching services?"

Coaching Clients:

Question: "As a client, what should I be aware of before providing my consent to participate in AI coaching services?"

Organizations Purchasing Coaching:

Question: "What processes has the Provider implemented to ensure that AI coaching systems are obtaining explicit client consent before beginning coaching services?"

Coaching Supervisors:

Question: "How can coaching supervisors help coaches monitor and verify that AI coaching systems are securing proper client consent before service provision?"

Software Developers (Providers):

Question: "What design and functionality considerations should software developers prioritize to facilitate clear and explicit client opt-in for AI coaching services?"

Coach Training Organizations:

Question: "In what ways can coach training organizations educate future coaches about the importance of securing explicit client consent in AI coaching?"

### 6.3.3 Element B.3.3: Agreement for New Use Cases

Professional Coaches:

Question: "How can I ensure that the AI system seeks and receives client assent before introducing new use cases during the coaching process?"

Coaching Clients:

Question: "As a client, how will I be informed about new use cases or features in the AI coaching process, and what does giving my assent entail?"

Organizations Purchasing Coaching:

Question: "What procedures should we put in place to ensure that AI coaching systems obtain client assent before introducing new use cases or features?"

Coaching Supervisors:

Question: "How can coaching supervisors help coaches influence the process of seeking and obtaining client assent for new use cases and features in AI coaching systems?"

Software Developers (Providers):

Question: "What design considerations are crucial for software developers to ensure that AI coaching applications require and record client assent for new use cases?"

Coach Training Organizations:

Question: "How should coach training programs incorporate education about the importance of client assent for new use cases in AI coaching?"

## 6.4 B.4: Co-creating the Relationship: Cultivates Trust and Safety

### 6.4.1 Element B.4.1: Information on AI Design and Intent

Professional Coaches:

Question: "How can I use information about the AI system's creators, scientific foundations, ownership, and supporting research to build trust and understanding with clients?"

Coaching Clients:

Question: "As a client, what details should I expect to receive about the AI system's design, its creators, scientific basis, and ownership to feel confident and informed?"

Organizations Purchasing Coaching:

Question: "What steps should organizations take to ensure the AI coaching systems they use transparently provide information about their design, creators, and scientific foundations?"

Coaching Supervisors:

Question: "How can coaching supervisors facilitate the dissemination of information about the AI system's design and intent to enhance transparency and trust?"

Software Developers (Providers):

Question: "What approaches should software developers take to transparently communicate the design, intent, and scientific basis of AI coaching systems to users?"

Coach Training Organizations:

Question: "In what ways can coach training programs prepare future coaches to understand and communicate the design and intent behind AI coaching systems?"

### 6.4.2 Element B.4.2: Inclusive Dialogue and Responsiveness

Professional Coaches:

Question: "How can I ensure that the AI system is facilitating an inclusive and culturally sensitive dialogue, and how can they augment this with their expertise?"

Coaching Clients:

Question: "As a client, what should I expect in terms of the AI system's capacity for understanding and respecting my cultural background and preferences?"

Organizations Purchasing Coaching:

Question: "How has the Provider ensured the inclusivity, cultural sensitivity, and responsiveness of their AI coaching systems?"

Coaching Supervisors:

Question: "How can coaching supervisors help coaches assess and enhance the AI system's abilities in fostering inclusive, respectful, and culturally savvy communication?"

Software Developers (Providers):

Question: "What strategies should software developers employ to ensure AI coaching systems are designed for inclusive dialogue and are responsive to diverse client needs and feedback?"

Coach Training Organizations:

Question: "How should coach training organizations prepare future coaches to work with AI systems that support inclusive and culturally sensitive dialogues?"

### 6.4.3 Element B.4.3: Domain Specificity Information

Professional Coaches:

Question: "How can I guide clients in understanding the domain specificity of the AI system and its implications for their coaching experience?"

Coaching Clients:

Question: "As a client, how can I be informed about the specific domain expertise of the AI system and how this aligns with my coaching needs?"

Organizations Purchasing Coaching:

Question: "What steps should organizations take to ensure that AI coaching systems clearly communicate their domain specificity and utility to clients?"

Coaching Supervisors:

Question: "How can coaching supervisors help coaches ensure that AI coaching systems are transparent about their domain specificity and effectively communicate this to clients?"

Software Developers (Providers):

Question: "How can we clearly define and communicate the domain specificity and utility of our AI coaching systems?"

Coach Training Organizations:

Question: "In what ways should coach training programs prepare future coaches to understand and explain the domain specificity of AI coaching systems to clients?"

#### 6.4.4 Element B.4.4: Access to Human Coach

Professional Coaches:

Question: "How can I integrate our processes with AI systems to ensure clients can easily transition to or incorporate human coaching as needed?"

Coaching Clients:

Question: "As a client, how will I be informed about the option to engage with a human coach, and what are the steps to initiate this interaction?"

Organizations Purchasing Coaching:

Question: "Does the Provider make sure their AI coaching systems facilitate easy access to human coaches, either through scheduling or on-demand services?"

Coaching Supervisors:

Question: "How can coaching supervisors help the coach ensure that the option for clients to access a human coach is clearly communicated and easily executable in AI coaching systems?"

Software Developers (Providers):

Question: "What functionalities should we incorporate into AI systems to enable clients to seamlessly find and connect with a human coach?"

Coach Training Organizations:

Question: "In what ways can coach training programs prepare future coaches for roles where they may be accessed through AI systems as part of a blended coaching approach?"

#### 6.4.5 Element B.4.5: Mental Health Risk Indicators

Professional Coaches:

Question: "How can I be aware of and respond to mental health risk indicators identified by the AI system, and ensure appropriate action is taken?"

Coaching Clients:

Question: "As a client, how will I be informed about the AI system's limitations in handling mental health issues and the alternative resources for mental health help?"

Organizations Purchasing Coaching:

Question: "What protocols should we have in place to ensure AI coaching systems can identify mental health risk indicators, clearly communicate their limitations to clients and redirect to healthcare professionals where needed?"

Coaching Supervisors:

Question: "How can coaching supervisors help coaches manage ethical use of mental health risks when using in AI coaching systems and ensure ethical and professional referrals?"

Software Developers (Providers):

Question: "What capabilities should be built into AI systems to detect potential mental health risks, communicate their limitations in handling such situations, and refer to healthcare providers when appropriate?"

Coach Training Organizations:

Question: "How should coach training programs prepare coaches to work alongside AI systems that may detect mental health risk indicators, or redirect clients toward medical professionals?"

## 6.5 B.5: Co-Creating the Relationship: Maintains Presence

### 6.5.1 Element B.5.1.1: Clear Representation of AI Nature

Professional Coaches:

Question: "How can I ensure that the AI system they use does not mislead clients by overly anthropomorphizing, and maintains clarity about its artificial nature?"

Coaching Clients:

Question: "As a client, how can I be certain of the non-human status of the AI coaching system throughout my interactions with it?"

Organizations Purchasing Coaching:

Question: "What measures should we put in place to ensure AI coaching systems are not deceptive in their presentation and clearly identify themselves as AI-driven?"

Coaching Supervisors:

Question: "How can coaching supervisors help coaches ensure that AI coaching applications maintain an appropriate balance in tone and presentation to avoid client discomfort or deception?"

Software Developers (Providers):

Question: "What design principles should we implement to ensure AI coaching systems explicitly and periodically remind users of their artificial nature?"

Coach Training Organizations:

Question: "How should we educate future coaches about the importance of transparency in AI coaching systems regarding their artificial nature?"

## 6.5.2 Element B.5.1.2: Tone and Presentation

Professional Coaches:

Question: "How can I contribute to and reinforce the professional and straightforward tone of AI coaching systems in their interactions with clients?"

Coaching Clients:

Question: "As a client, what should I expect from the tone and presentation of the AI coaching system, and how can I provide feedback if it does not meet my expectations?"

Organizations Purchasing Coaching:

Question: "What standards should we set for the tone and presentation of AI coaching systems to ensure they are professional and not misleadingly human-like?"

Coaching Supervisors:

Question: "How can coaching supervisors help coaches monitor and guide the ongoing evaluation and adjustment of the AI system's tone and presentation based on client feedback?"

Software Developers (Providers):

Question: "What design strategies should we use to create a professional tone (e.g. Ontologies, Personas) in AI coaching systems and to incorporate client feedback mechanisms?"

Coach Training Organizations:

Question: "How should we educate future coaches about the significance of tone and presentation in AI coaching systems and the role of client feedback in shaping them?"

## 6.5.3 Element B.5.2: Client Input Review and Modification

Professional Coaches:

Question: "How can I guide clients in effectively reviewing and modifying their inputs in the AI system to enhance their coaching experience?"

Coaching Clients:

Question: "As a client, how can I access and alter my inputs in the AI coaching system, and how does this capability affect my overall coaching journey?"

Organizations Purchasing Coaching:

Question: "What features should we ensure are present in AI coaching systems to allow clients the autonomy to review and change their inputs?"

Coaching Supervisors:

Question: "How can I help coaches ensure that clients are aware of and can easily use the functionality to review and modify their inputs in AI coaching systems?"

Software Developers (Providers):

Question: "What design elements should we incorporate to enable clients to easily review and modify their inputs in AI coaching systems?"

Coach Training Organizations:

Question: "How should we prepare future coaches to assist clients in understanding and using the input review and modification features of AI coaching systems?"

#### 6.5.4 Element B.5.3: Emotional State Assessments and Responses

Professional Coaches:

Question: "How can I interpret and utilize the AI system's assessments of clients' emotional states to enhance the effectiveness of coaching sessions (where allowed by law)?"

Coaching Clients:

Question: "As a client, how will the AI system assess my emotional state, and what should I expect in terms of its responses and support?"

Organizations Purchasing Coaching:

Question: "What measures should we implement to ensure that AI coaching systems can accurately assess and respond to clients' emotional states in jurisdictions where it is lawful?"

Coaching Supervisors:

Question: "How can I help coaches evaluate the effectiveness of AI systems in assessing and responding to clients' emotional states?"

Software Developers (Providers):

Question: "What technologies and methodologies should we incorporate into AI systems to enable accurate emotional state assessments and appropriate responses?"

Coach Training Organizations:

Question: "How should we prepare future coaches to work alongside AI systems that assess and respond to clients' emotional states, particularly in the context of the Vygotsky zone of proximal development?"

## 6.6 C.6 Communicating Effectively: Listens Actively

### 6.6.1 Element C.6.1: Responsive Interaction Based on Client Input

Professional Coaches:

Question: "How can I ensure that the AI system adapts its coaching style based on a client's previous inputs to demonstrate active listening and personalized coaching?"

Coaching Clients:

Question: "As a client, how will the AI system show that it's actively listening and adapting to my previous inputs during our interactions?"

Organizations Purchasing Coaching:

Question: "What steps (if any) should we take to verify that AI coaching systems are effectively adapting their responses based on clients' past interactions?"

Coaching Supervisors:

Question: "How can I help coaches to evaluate and leverage the AI system's ability to adapt its responses according to the client's historical inputs?"

Software Developers (Providers):

Question: "What features and functionalities should we integrate into AI coaching systems to ensure they adapt their interactions based on prior client inputs and their evolving Vygotsky zone?"

Coach Training Organizations:

Question: "How should we prepare future coaches to work with AI systems that dynamically adjust coaching strategies based on clients' previous interactions?"

### 6.6.2 Element C.6.2: Explanatory Information for Questions

Professional Coaches:

Question: "How can I ensure that the AI coaching system provides sufficient explanatory information for the questions it asks, aiding in client understanding and engagement?"

Coaching Clients:

Question: "As a client, how will I be provided with context and understanding for any questions asked by the AI coaching system?"

Organizations Purchasing Coaching:

Question: "What criteria should we establish to ensure the AI coaching systems offer explanatory information for their questions, enhancing clarity and value for clients?"

Coaching Supervisors:

Question: "How can I help coaches assess the effectiveness of AI systems in providing clear, contextual explanations for the questions they pose to clients?"

Software Developers (Providers):

Question: "What strategies should we implement in AI coaching systems to ensure that questions are accompanied by explanatory information and, when advanced, linked to additional developmental resources?"

Coach Training Organizations:

Question: "How should we prepare future coaches to integrate and leverage AI systems that provide explanatory information for their questions and reference advanced developmental resources?"

### 6.6.3 Element C.6.3: Regular Feedback to Client

Professional Coaches:

Question: "How can I ensure that the AI system provides clients with regular, constructive feedback that is aligned with their coaching goals?"

Coaching Clients:

Question: "As a client, what kind of regular feedback should I expect from the AI coaching system, and how will it support my development?"

Organizations Purchasing Coaching:

Question: "What features should we look for in AI coaching systems to ensure they provide clients with regular, meaningful feedback, motivational praise, and measurements of progress?"

Coaching Supervisors:

Question: "How can I help coaches monitor and enhance the effectiveness of regular feedback provided by AI coaching systems to clients, ensuring it is accurate and motivating?"

Software Developers (Providers):

Question: "What methodologies should we employ to develop AI systems that provide not only regular feedback but also proactive, motivating praise and measurements that help the client's realize goals in the timeframe sought?"

Coach Training Organizations:

Question: "How should we prepare future coaches to integrate AI systems capable of providing regular, goal-oriented feedback and positive reinforcement to clients?"

## 6.7 C.7: Communicating Effectively: Evokes Awareness

### 6.7.1 Element C.7.1: Use of Diverse Questioning Techniques

Professional Coaches:

Question: "How can I ensure that the AI system effectively uses a mix of questioning techniques, such as open and closed questions, metaphors, and analogies, to enhance client self-awareness and insight?"

Coaching Clients:

Question: "As a client, how will the AI system's use of various questioning techniques, including metaphors and analogies, aid in my self-reflection and learning process?"

Organizations Purchasing Coaching:

Question: "Are the AI systems we are considering equipped to dynamically adjust their questioning techniques according to each client's unique needs and developmental zone?"

Coaching Supervisors:

Question: "How can I help coaches assess potential AI systems for their use of diverse questioning techniques to facilitate deeper client self-awareness and insight?"

Software Developers (Providers):

Question: "What strategies should we implement in AI systems to dynamically tailor questioning techniques to each client's evolving Vygotsky zone for optimal coaching support?"

Coach Training Organizations:

Question: "How should we prepare future coaches to leverage AI systems that use a variety of questioning techniques to evoke client self-awareness and learning?"

### 6.7.2 Element C.7.2: Strategic Use of Metaphor, Silence, and Analogy

Professional Coaches:

Question: "How can I ensure that the AI system uses metaphors, silence, and analogies strategically to enhance the depth and effectiveness of coaching conversations?"

Coaching Clients:

Question: "As a client, how will the strategic use of metaphor, silence, and analogy by the AI system contribute to my insight and understanding during coaching sessions?"

Organizations Purchasing Coaching:

Question: "What features should we look for in AI coaching systems to ensure they can effectively use metaphor, silence, and analogy, and offer customization options?"

Coaching Supervisors:

Question: "How can I guide and assess the AI system's use of metaphor, silence, and analogy in coaching interactions for enhanced client insight?"

Software Developers (Providers):

Question: "What approaches should we take to enable AI coaching systems to use metaphor, silence, and analogy effectively, and to allow user customization of the system's ontology and persona?"

Coach Training Organizations:

Question: "How should we prepare future coaches to work with AI systems that strategically use metaphor, silence, and analogy, and understand the significance of customization in these areas?"

### 6.7.3 Element C.7.3: Directive and Nondirective Interaction Balance

Professional Coaches:

Question: "How can I ensure that the AI system tailors a balance between directive and nondirective interactions to suit the client's needs during coaching sessions?"

Coaching Clients:

Question: "As a client, how will I experience the balance of directive and nondirective interactions in the AI coaching system, and how does this support my coaching journey?"

Organizations Purchasing Coaching:

Question: "What criteria should we use to evaluate whether AI coaching systems appropriately balance directive and nondirective interactions for effective client coaching?"

Coaching Supervisors:

Question: "How can I help coaches assess the AI system's ability to balance directive and nondirective interactions in a way that optimizes client growth and learning?"

Software Developers (Providers):

Question: "What features should we integrate into AI coaching systems to ensure a balanced approach between directive and nondirective interactions tailored to the unique stage and step of the user's development (Vygotsky Zone)?"

Coach Training Organizations:

Question: "How should we prepare future coaches to understand and work with AI systems that balance directive and nondirective coaching approaches that adjust to the client's Vygotsky Zone?"

#### 6.7.4 Element C.7.4: Offering Alternative Perspectives

Professional Coaches:

Question: "How can I ensure that the AI system effectively offers alternative perspectives to clients, contributing to a broader understanding and enhanced self-awareness?"

Coaching Clients:

Question: "As a client, how will the AI system present me with different viewpoints, and how can this aid in expanding my perspective?"

Organizations Purchasing Coaching:

Question: "What features should we look for in AI coaching systems to ensure they are capable of providing clients with alternative perspectives?"

Coaching Supervisors:

Question: "How can I help coaches evaluate an AI system's ability to offer alternative perspectives to clients and its impact on their coaching experience?"

Software Developers (Providers):

Question: "What design considerations should we prioritize to enable AI coaching systems to present alternative perspectives effectively to clients?"

Coach Training Organizations:

Question: "How should we prepare future coaches to leverage AI systems that can offer clients alternative perspectives, enhancing the coaching process?"

## 6.8 D.8 Cultivating Learning and Growth: Facilitates Client Growth

### 6.8.1 Element D.8.1: Goal Setting and Progress Monitoring

Professional Coaches:

Question: "How can I use the AI system's goal setting and progress tracking features to enhance my clients' sense of achievement and direction in their coaching journey?"

Coaching Clients:

Question: "As a client, how will the AI system help me in setting clear goals and tracking my progress, and what advanced features can I expect for a more tailored experience?"

Organizations Purchasing Coaching:

Question: "What functionalities should we ensure are present in AI coaching systems for effective goal setting and progress monitoring, including aggregated dashboards for predictive insights across the organization?"

Coaching Supervisors:

Question: "How can I help coaches utilize AI systems for client goal setting and progress monitoring to maximize client growth and achievement?"

Software Developers (Providers):

Question: "What advanced features should we incorporate into AI coaching systems to provide clients and buyers with predictive insights and adaptive recommendations for goal setting and progress tracking, including organization or team-level dashboards?"

Coach Training Organizations:

Question: "How should we prepare future coaches to integrate and utilize AI systems that support clients in goal setting and progress monitoring, including the use of advanced tracking features?"

### 6.8.2 Element D.8.2: Contextual Understanding through Client Sharing

Professional Coaches:

Question: "How can I ensure that the AI coaching system effectively gathers and understands client information to provide contextually relevant coaching?"

Coaching Clients:

Question: "As a client, how will the AI system facilitate my sharing of personal insights, and how will it use this information to enhance my coaching experience?"

Organizations Purchasing Coaching:

Question: "What should we consider in AI coaching systems to ensure they have the capability to comprehend and use client-shared information for contextual coaching?"

Coaching Supervisors:

Question: "How can I assess the AI system's ability to gather and interpret client information for a deeper understanding of their unique context?"

Software Developers (Providers):

Question: "What advancements in AI should we integrate to deepen the AI system's understanding of client contexts from shared information?"

Coach Training Organizations:

Question: "How should we prepare future coaches to work with AI systems that utilize client insights for contextual understanding and personalized coaching?"

### 6.8.3 Element D.8.3: Exploration of Adjusted or Alternative Goals

Professional Coaches:

Question: "How can I support clients using the AI system to explore and redefine their goals as they make developmental progress?"

Coaching Clients:

Question: "As a client, how can I use the AI system to reassess and set new goals, and what kind of intelligent suggestions might it offer based on my progress and changing preferences?"

Organizations Purchasing Coaching:

Question: "What capabilities should we look for in AI coaching systems to ensure they support clients in exploring and setting adjusted or alternative goals, as the client's "Goldilocks Zone" changes?"

Coaching Supervisors:

Question: "How can I help coaches to help clients use AI systems for the exploration and adjustment of their goals, taking into account their evolving needs and achievements?"

Software Developers (Providers):

Question: "What features should we develop in AI coaching systems to suggest personalized alternative goals based on clients' evolving preferences and improving Vygotsky zone?"

Coach Training Organizations:

Question: "How should we prepare future coaches to assist clients in using AI systems for the dynamic exploration and adjustment of their coaching goals?"

#### 6.8.4 Element D.8.4: Validation of Goals

Professional Coaches:

Question: "How can I leverage the AI system's capabilities to make sure the client's goals are optimal (challenging but achievable)?"

Coaching Clients:

Question: "As a client, how will the AI system help me assess the level of challenge and feasibility of my goals, and what kind of advanced measurements can I expect?"

Organizations Purchasing Coaching:

Question: "What should we ensure in terms of the AI system's ability to align coaching engagements goals with business objectives, including making sure the difficulty and attainability are optimal?"

Coaching Supervisors:

Question: "How can I help coaches in using AI systems to critically assess and validate client goals, ensuring they are realistic and well-structured?"

Software Developers (Providers):

Question: "What advanced measurement features should we integrate into AI coaching systems for an in-depth assessment, monitoring and forecasting of client goal attainability and challenge levels at the engagement, team and/or organizational levels of analysis?"

Coach Training Organizations:

Question: "How should we prepare future coaches to work with AI systems that offer comprehensive goal validation and feasibility assessments?"

#### 6.8.5 Element D.8.5: Problem Clarification

Professional Coaches:

Question: "How can I ensure that the AI system is effectively assisting clients in clarifying their challenges, and how can I use AI to augment this process with my coaching skills?"

Coaching Clients:

Question: "As a client, how will the AI system help me in defining and understanding my challenges, and what advanced diagnostic tools might it use?"

Organizations Purchasing Coaching:

Question: "What functionalities should we look for in AI coaching systems to ensure they not only clarify but also prioritize client problems based on their "Goldilocks Zone", impact and urgency?"

Coaching Supervisors:

Question: "How can I guide coaches in utilizing AI systems that help clients clarify and prioritize their challenges effectively?"

Software Developers (Providers):

Question: "What advanced diagnostic features should we develop in AI coaching systems for thorough problem clarification and prioritization for clients specific Vygotsky zone?"

Coach Training Organizations:

Question: "How should we prepare future coaches to integrate AI systems capable of assisting in problem clarification and prioritization in their coaching practices?"

#### 6.8.6 Element D.8.6: Generation of Alternative Solutions

Professional Coaches:

Question: "How can I support the AI system in fostering clients' creative thinking and generation of diverse solutions to their challenges?"

Coaching Clients:

Question: "As a client, how will the AI system assist me in creating various solutions to my challenges, and what kind of problem-solving frameworks might it use?"

Organizations Purchasing Coaching:

Question: "What capabilities should we ensure in AI coaching systems we buy to facilitate the generation of creative and diverse solutions by clients?"

Coaching Supervisors:

Question: "How can I guide coaches in leveraging AI systems that help clients generate and evaluate multiple solutions to their problems?"

Software Developers (Providers):

Question: "What creative problem-solving frameworks should we integrate into AI coaching systems to enhance the generation of alternative solutions by clients?"

Coach Training Organizations:

Question: "How should we prepare future coaches to utilize AI systems that aid clients in the creative generation of diverse solutions?"

#### 6.8.7 Element D.8.7: Consideration of Solution Consequences

Professional Coaches:

Question: "How can I ensure that the AI system effectively prompts clients to consider the consequences of their proposed solutions, and how can I supplement this with my own insights?"

Coaching Clients:

Question: "As a client, how will the AI system help me understand the potential outcomes of the solutions I choose?"

Organizations Purchasing Coaching:

Question: "What should we look for in AI coaching systems to ensure they encourage clients to think about the consequences of their solutions, including providing sophisticated outcome analyses?"

Coaching Supervisors:

Question: "How can I guide coaches in utilizing AI systems that aid clients in contemplating the potential impacts of their chosen solutions?"

Software Developers (Providers):

Question: "What features should we develop in AI coaching systems to provide in-depth analysis of the potential outcomes, including probabilistic and long-term impacts, of client solutions?"

Coach Training Organizations:

Question: "How should we prepare future coaches to work with AI systems that assist clients in considering the consequences of their solutions, including advanced outcome analyses?"

## 6.9 D.9 Cultivating Learning and Growth: Reinforces Client Growth

### 6.9.1 Element D.9.1: Self-Assessment and Growth Tracking

Professional Coaches:

Question: "How can I use the AI system's self-assessment and growth tracking features to support clients in recognizing their progress and areas for further development?"

Coaching Clients:

Question: "As a client, how can I utilize the AI system's capabilities for self-assessment and tracking my growth, and what advanced analytics might be available to me for deeper insights?"

Organizations Purchasing Coaching:

Question: "What should we consider when evaluating AI coaching systems for their ability to provide clients with effective self-assessment tools and growth tracking, including unobtrusive analytics?"

Coaching Supervisors:

Question: "How can I guide coaches in leveraging AI systems for facilitating client self-assessment and growth tracking, ensuring comprehensive and insightful development tracking?"

Software Developers (Providers):

Question: "What features should we integrate into AI coaching systems to enable thorough self-assessment and growth tracking for clients, including advanced unobtrusive analytics?"

Coach Training Organizations:

Question: "How should we prepare future coaches to utilize AI systems that provide clients with self-assessment tools and growth tracking, enhancing their coaching effectiveness?"

### 6.9.2 Element D.9.2: Goal Commitment Notification

Professional Coaches:

Question: "How can I reinforce the AI system's reminders to clients about their commitments during goal setting, and provide additional motivation and strategies to maintain their focus?"

Coaching Clients:

Question: "As a client, how will the AI system remind me of my commitments when setting goals, and what kind of personalized motivational messages might I receive?"

Organizations Purchasing Coaching:

Question: "What capabilities should we look for in AI coaching systems to ensure they effectively remind clients of their goal commitments and offer motivational support?"

Coaching Supervisors:

Question: "How can I help coaches ensure that AI systems are effectively notifying clients of their accountability and providing motivational strategies during goal setting?"

Software Developers (Providers):

Question: "What features should we develop in AI coaching systems to effectively remind clients of their commitments and provide personalized motivational support?"

Coach Training Organizations:

Question: "How should we prepare future coaches to work with AI systems that notify clients of their goal commitments and offer motivational strategies?"

### 6.9.3 Element D.9.3: Regular Practice Reminders

Professional Coaches:

Question: "How can I utilize the AI system's regular practice reminders to supplement my coaching, ensuring clients stay engaged and apply what they've learned between sessions?"

Coaching Clients:

Question: "As a client, what kind of regular reminders will I receive from the AI system to encourage my ongoing practice and reflection, and how will these be tailored to my progress?"

Organizations Purchasing Coaching:

Question: "What features should we ensure are present in AI coaching systems for providing regular, customized practice reminders to clients, based on their individual progress and preferences?"

Coaching Supervisors:

Question: "How can I help coaches ensure that AI systems are effectively providing regular and personalized reminders to clients to reinforce their learning and practice?"

Software Developers (Providers):

Question: "What strategies should we implement to develop AI systems that offer customized reminders to clients, aligning with their progress and coaching needs?"

Coach Training Organizations:

Question: "How should we prepare future coaches to work with AI systems that provide regular, personalized practice reminders to enhance client development?"

#### 6.9.4 Element D.9.4: Insight to Action Prompting

Professional Coaches:

Question: "How can I support the AI system's prompts to clients to turn their insights into practical actions, and provide additional guidance as needed?"

Coaching Clients:

Question: "As a client, how will the AI system help me translate my insights into actionable steps, and what kind of intelligent suggestions might I expect?"

Organizations Purchasing Coaching:

Question: "What capabilities should we look for in AI coaching systems to ensure they effectively encourage clients to act on their insights, including offering tailored, actionable steps?"

Coaching Supervisors:

Question: "How can I help coaches guide coaches in ensuring AI systems are effectively prompting clients to convert insights into practical actions and offering intelligent, personalized suggestions?"

Software Developers (Providers):

Question: "What features should we integrate into AI coaching systems to assist clients in identifying specific, actionable steps based on their unique insights and proficiency levels?"

Coach Training Organizations:

Question: "How should we prepare future coaches to work with AI systems that prompt clients to turn insights into actions and provide tailored, intelligent action suggestions?"

#### 6.9.5 Element D.9.5: Recognition of Client Progress

Professional Coaches:

Question: "How can I complement the AI system's features to acknowledge and celebrate clients' progress and milestones in a way that feels personalized and encouraging?"

Coaching Clients:

Question: "As a client, what kind of recognition and celebration can I expect from the AI system when I achieve milestones, and how will it be personalized to my journey?"

Organizations Purchasing Coaching:

Question: "What should we look for in AI coaching systems to ensure they have an advanced recognition system that appropriately and engagingly celebrates client milestones?"

Coaching Supervisors:

Question: "How can I help coaches ensure that AI systems effectively recognize and celebrate clients' progress in a manner that boosts their motivation and commitment to their goals?"

Software Developers (Providers):

Question: "What functionalities should we develop in AI coaching systems to create an advanced, personalized system for celebrating client milestones and progress?"

Coach Training Organizations:

Question: "How should we prepare future coaches to leverage AI systems that recognize and celebrate client progress in a personalized and meaningful way?"

#### 6.9.6 Element D.9.6: Evaluation of Client Achievements

Professional Coaches:

Question: "How can I utilize the AI system's measurements of client achievements to provide more in-depth feedback and guidance for their continued growth?"

Coaching Clients:

Question: "As a client, how will the AI system assess my achievements, and what kind of in-depth analysis and feedback can I expect for my progress?"

Organizations Purchasing Coaching:

Question: "What functionalities should we ensure are included in AI coaching systems for comprehensive measurement, evaluation and feedback on client achievements?"

Coaching Supervisors:

Question: "How can I help coaches oversee and enhance the AI system's capability to provide detailed assessments, evaluation and feedback on clients' achievements?"

Software Developers (Providers):

Question: "What features should we develop in AI coaching systems to enable a comprehensive measurement, evaluation and feedback system for client achievements?"

Coach Training Organizations:

Question: "How should we prepare future coaches to effectively use AI systems that offer detailed measurement, evaluations and feedback on client achievements?"

## 6.10 E.10 Assurance and Testing: Coaching Reliability Measures

### 6.10.1 Element E.10.1: Client Feedback Collection on System Efficacy

Professional Coaches:

Question: "How can I encourage clients to provide qualitative and quantitative feedback on the AI system's efficacy and contribute to the system's improvement and effectiveness?"

Coaching Clients:

Question: "As a client, how will I be involved in providing feedback on the system's efficacy, and what kind of comprehensive measurement tools might be used?"

Organizations Purchasing Coaching:

Question: "What strategies should we implement to systematically collect and analyze client feedback on the AI system's efficacy, including regular surveys and interactive feedback mechanisms?"

Coaching Supervisors:

Question: "How can I help coaches facilitate the collection of in-depth client feedback on the AI system's efficacy and ensure this feedback is used to enhance the system's performance?"

Software Developers (Providers):

Question: "What methodologies should we use to develop comprehensive feedback collection systems for evaluating the AI system's efficacy from the client's perspective?"

Coach Training Organizations:

Question: "How should we prepare future coaches to understand the importance of client feedback in assessing and improving the efficacy of AI coaching systems?"

### 6.10.2 Element E.10.2: Validation of System Capabilities

Professional Coaches:

Question: "How can I stay informed about the formal studies validating the AI system's capabilities and ensure that I am accurately representing these to clients?"

Coaching Clients:

Question: "As a client, how can I be assured that the functionalities and benefits claimed by the AI system are backed by trustworthy studies?"

Organizations Purchasing Coaching:

Question: "What measures should we take to verify that the AI coaching system's capabilities are validated through rigorous studies and truly reflect what is claimed?"

Coaching Supervisors:

Question: "How can I guide coaches in understanding and communicating the validated capabilities of the AI system to clients, based on formal studies?"

Software Developers (Providers):

Question: "What processes, and research designs should we implement to conduct extensive validation studies for the AI system's capabilities, ensuring they are reliable and accurately represented (e.g. Experiments or Quasi-Experiments)?"

Coach Training Organizations:

Question: "How should we prepare future coaches to critically assess and understand the validated capabilities of AI coaching systems, particularly those involving diverse client groups?"

### 6.10.3 Element E.10.3: Accuracy and Bias Monitoring

Professional Coaches:

Question: "How can I keep track of and understand the AI system's ongoing assessments of its accuracy and bias, to ensure the highest quality of coaching for my clients?"

Coaching Clients:

Question: "As a client, how can I be informed about the AI system's accuracy and any biases in its application, and how are these being monitored and addressed?"

Organizations Purchasing Coaching:

Question: "What mechanisms should we have in place to ensure that the AI coaching system continuously monitors and addresses its accuracy and potential biases?"

Coaching Supervisors:

Question: "How can I oversee the AI system's performance in terms of accuracy and bias, and ensure that any issues are promptly addressed?"

Software Developers (Providers):

Question: "What advanced analytical tools should we implement to continuously assess and minimize biases in the AI system, ensuring precision and fairness?"

Coach Training Organizations:

Question: "How should we educate future coaches about the importance of monitoring accuracy and bias in AI coaching systems and the tools used for these assessments?"

#### 6.10.4 Element E.10.4: System Testing with Diverse Clients

Professional Coaches:

Question: "How can I contribute to the testing process of the AI system with diverse clients, ensuring its applicability and reliability across different demographics?"

Coaching Clients:

Question: "As a client, how can I be sure that the AI system has been thoroughly tested with a diverse group to ensure it meets a wide range of needs and contexts?"

Organizations Purchasing Coaching:

Question: "What criteria should we use to assess the comprehensiveness of the AI system's testing process, especially regarding its diversity and the scale of client involvement?"

Coaching Supervisors:

Question: "How can I oversee the effectiveness of the AI system's testing with diverse clients and ensure the feedback from these tests is integrated into system improvements?"

Software Developers (Providers):

Question: "What strategies should we adopt to conduct extensive and diverse client testing to validate the system's reliability across different groups and contexts?"

Coach Training Organizations:

Question: "How should we prepare future coaches to understand the significance of diverse client testing in AI systems and its impact on coaching efficacy?"

#### 6.10.5 Element E.10.5: Training Data Monitoring and Quality Tests

Professional Coaches:

Question: "How can I stay informed about the quality and relevance of the training data used by the AI system, to ensure the integrity and effectiveness of the coaching it provides?"

Coaching Clients:

Question: "As a client, how can I be assured that the AI system is continuously updated and checked for the quality and relevance of its training data?"

Organizations Purchasing Coaching:

Question: "What measures should we implement to ensure that the AI coaching system regularly undergoes quality checks and updates of its training data for accuracy and relevance?"

Coaching Supervisors:

Question: "How can I oversee the process of monitoring and testing the AI system's training data to maintain system integrity and coaching quality?"

Software Developers (Providers):

Question: "What continuous and automated processes should we integrate into the AI system for ongoing quality checks and updates of its training data?"

Coach Training Organizations:

Question: "How should we prepare future coaches to understand the importance of regular monitoring and quality assessment of training data in AI coaching systems?"

#### 6.10.6 Element E.10.6: System Design Review by Coaching Experts

Professional Coaches:

Question: "How can I, as a professional coach, be involved in the review process of AI coaching systems to ensure they adhere to industry standards and coaching best practices?"

Coaching Clients:

Question: "As a client, how can I be confident that the AI coaching system I'm using has been designed and periodically reviewed by qualified coaching experts?"

Organizations Purchasing Coaching:

Question: "What criteria should we establish to ensure that the design of AI coaching systems is regularly reviewed and validated by a diverse panel of coaching experts?"

Coaching Supervisors:

Question: "How can I facilitate and contribute to the regular review process of AI coaching systems by a panel of diverse coaching experts?"

Software Developers (Providers):

Question: "What processes should we implement to ensure the AI system's design is periodically reviewed by a diverse range of coaching experts for quality and effectiveness?"

Coach Training Organizations:

Question: "How should we prepare coaching students to effectively review and provide input on the design of AI coaching systems, ensuring they meet the latest industry standards?"

#### 6.10.7 Element E10.7: Client Context Understanding and Appropriate Responses

Professional Coaches:

Question: "How can I ensure that the AI coaching system adequately understands client contexts and tailors its responses appropriately without causing offense?"

Coaching Clients:

Question: "As a client, how can I expect the AI system to understand my specific context and needs, and what measures are in place to prevent offensive responses?"

Organizations Purchasing Coaching:

Question: "What standards should we set for AI coaching systems to demonstrate advanced contextual understanding and provide highly relevant and sensitive responses to clients?"

Coaching Supervisors:

Question: "How can I monitor and guide the AI system to ensure it accurately understands client contexts and delivers appropriate, non-offensive responses?"

Software Developers (Providers):

Question: "What advanced algorithms and contextual understanding techniques should we integrate into the AI system to enhance response relevance and sensitivity?"

Coach Training Organizations:

Question: "How should we prepare future coaches to work with AI systems that are designed to understand client contexts and provide highly tailored, sensitive responses?"

## 6.11 E.11 Assurance and Testing: System Usability

### 6.11.1 Element E.11.1: User Experience and Technology Adoption Research

Professional Coaches:

Question: "How can I stay informed about ongoing research on the usability and technology adoption aspects of AI coaching systems, to ensure they meet client needs effectively?"

Coaching Clients:

Question: "As a client, how am I being considered in the AI system's usability studies, and how does ongoing research contribute to a better user experience for me?"

Organizations Purchasing Coaching:

Question: "What type of usability and technology adoption research should we expect from AI coaching system providers, including evidence of comprehensive studies involving diverse global user demographics?"

Coaching Supervisors:

Question: "How can I ensure that the AI coaching systems used in our programs are backed by thorough usability research that takes into account a wide range of user experiences?"

Software Developers (Providers):

Question: "What methodologies should we adopt for conducting comprehensive research on usability and technology adoption, incorporating a broad spectrum of user demographics for continuous system improvement in Human Factors and Ergonomics studies?"

Coach Training Organizations:

Question: "How should we prepare future coaches to understand the significance of user experience and technology adoption research in the development and refinement of AI coaching systems?"

#### 6.11.2 Element E.11.2: Accessibility and Instructional Support

Professional Coaches:

Question: "How can I assist clients in navigating the AI system's primary functionalities and guide them towards additional developmental support when needed?"

Coaching Clients:

Question: "As a client, what kind of intuitive access and support can I expect from the AI system, and how are advanced tutorials and help options tailored to different proficiency levels?"

Organizations Purchasing Coaching:

Question: "What measures should we implement to ensure the AI coaching system is easily accessible and understandable for clients, including comprehensive developmental support?"

Coaching Supervisors:

Question: "How can I oversee the user experience regarding the AI system's accessibility and instructional support to ensure it meets the needs of clients with varying levels of proficiency?"

Software Developers (Providers):

Question: "What features should we include in the AI system to make its primary functionalities intuitive and provide advanced, interactive tutorials for users of different skill levels?"

Coach Training Organizations:

Question: "How should we prepare future coaches to familiarize themselves with AI systems that offer varying levels of developmental support, ensuring they can guide clients effectively?"

#### 6.11.3 Element E.11.3: Disclosure of Basic System Functionality

Professional Coaches:

Question: "How can I ensure that the AI system's disclosures about its functionalities are communicated in clear, simple language to clients?"

Coaching Clients:

Question: "As a client, how will the AI system explain its functionalities to me in a way that's easy to understand?"

Organizations Purchasing Coaching:

Question: "What standards should we set for AI coaching systems to ensure they use user-friendly language for explaining basic functionalities?"

Coaching Supervisors:

Question: "How can I oversee the communication strategies of AI coaching systems to ensure they are clear and accessible?"

Software Developers (Providers):

Question: "What language optimization tools should we use in AI systems to ensure the clarity and accessibility of functionality disclosures, including translations for non-native speakers?"

Coach Training Organizations:

Question: "How should we prepare future coaches to work with AI systems that clearly disclose functionalities in simple language?"

#### 6.11.4 Element E.11.4: Content Management by Language Experts

Professional Coaches:

Question: "How can I be assured that the linguistic style provided by the AI system has been curated by qualified language experts for accuracy and cultural sensitivity?"

Coaching Clients:

Question: "As a client, how does the involvement of language experts in content management enhance my experience with the AI system, especially in terms of cultural relevance and linguistic accuracy?"

Organizations Purchasing Coaching:

Question: "What qualifications and diversity should we expect from the panel of language experts managing the AI system's content to ensure it meets global linguistic and cultural standards?"

Coaching Supervisors:

Question: "How can I validate that the AI system's content is managed by a diverse group of language experts, ensuring it is culturally sensitive and linguistically accurate?"

Software Developers (Providers):

Question: "What strategies should we adopt to collaborate with a diverse panel of language experts in the content management process for our AI system?"

Coach Training Organizations:

Question: "How should we educate future coaches about the importance of language expert involvement in AI system content management, especially for linguistic and cultural accuracy?"

#### 6.11.5 Element E.11.5: Non-Discriminatory Content

Professional Coaches:

Question: "How can I be certain that the content provided by the AI system is non-discriminatory and inclusive, and what role can I play in ensuring these standards are upheld?"

Coaching Clients:

Question: "As a client, how can I be assured that the AI system's content is free from discrimination and biases, promoting an inclusive coaching environment?"

Organizations Purchasing Coaching:

Question: "What measures should we take to ensure that the AI coaching system's content is consistently non-discriminatory and uses advanced tools to eliminate any biases?"

Coaching Supervisors:

Question: "How can I monitor and contribute to the process of ensuring that the AI system's content remains non-discriminatory and inclusive across diverse client groups?"

Software Developers (Providers):

Question: "What advanced screening tools and methodologies should we implement to rigorously detect and eliminate biases or discriminatory language in the AI system's content?"

Coach Training Organizations:

Question: "How should we prepare future coaches to recognize and address any discriminatory content within AI systems, ensuring a commitment to inclusivity and diversity?"

#### 6.11.6 Element E.11.6: Platform Availability

Professional Coaches:

Question: "How can I inform my clients about the platforms on which the AI coaching system is available and assist them in accessing it on their preferred device?"

Coaching Clients:

Question: "As a client, on which platforms can I access the AI system, and how does multi-platform accessibility enhance my coaching experience?"

Organizations Purchasing Coaching:

Question: "What steps should we take to ensure that the AI coaching system we choose is accessible on multiple platforms, catering to the diverse technological preferences of our clients?"

Coaching Supervisors:

Question: "How can I ensure that the AI coaching systems are easily accessible to clients on various platforms, and how does this impact their coaching journey?"

Software Developers (Providers):

Question: "What considerations should we make to optimize the AI system for multi-platform use, including desktop and mobile, to ensure it is easily accessible to a wide user base?"

Coach Training Organizations:

Question: "How should we prepare future coaches to work with AI systems that are available on multiple platforms, and how can they guide clients in using these platforms effectively?"

## 6.12 F.12 Technical Factors: Security and Privacy

### 6.12.1 Element F.12.1: Data Encryption for Storage and Transmission

Professional Coaches:

Question: "How can I reassure my clients that their personal and sensitive information is protected by robust encryption during both storage and transmission in the AI system?"

Coaching Clients:

Question: "As a client, how can I be sure that my data is securely encrypted when using the AI coaching system, both during storage and when it's being transmitted?"

Organizations Purchasing Coaching:

Question: "What encryption standards should we require from AI coaching systems to ensure the highest level of data confidentiality and security for our clients?"

Coaching Supervisors:

Question: "How can I verify that the AI coaching systems use advanced encryption technologies to secure client data against emerging cyber threats?"

Software Developers (Providers):

Question: "What advanced encryption technologies and regularly updated security protocols should we implement to ensure the utmost protection of client data in the AI system?"

Coach Training Organizations:

Question: "How should we educate future coaches about the importance of data encryption in AI coaching systems for ensuring client confidentiality and security?"

### 6.12.2 Element F.12.2: Secure Sign-On Process

Professional Coaches:

Question: "How can I guide clients through the secure sign-on process for the AI system, ensuring they understand the importance of these security measures for protecting their data?"

Coaching Clients:

Question: "As a client, what secure sign-on procedures will I need to follow to access the AI coaching system, and how do advanced methods like two-factor authentication enhance my data security?"

Organizations Purchasing Coaching:

Question: "What advanced user authentication methods should we expect from AI coaching systems to ensure robust security against unauthorized access?"

Coaching Supervisors:

Question: "How can I oversee and ensure the effectiveness of secure sign-on processes in AI coaching systems, including the use of two-factor authentication and biometric verification?"

Software Developers (Providers):

Question: "What are the best practices for implementing advanced user authentication methods in AI systems to provide enhanced security for user access?"

Coach Training Organizations:

Question: "How should we educate future coaches about the significance of secure sign-on processes in AI coaching systems and the technologies used for user authentication?"

### 6.12.3 Element F.12.3: System Availability

Professional Coaches:

Question: "How can I inform my clients about the expected availability of the AI coaching system and what contingency plans are in place for times when the system may be unavailable?"

Coaching Clients:

Question: "As a client, how often can I expect the AI coaching system to be available, and what measures are taken to ensure consistent access?"

Organizations Purchasing Coaching:

Question: "What guarantees should we look for regarding system availability, and what advanced server management strategies should be in place to minimize potential downtime?"

Coaching Supervisors:

Question: "How can I ensure that the AI coaching systems are reliably available for clients and that there are adequate failover strategies for maintaining consistent access?"

Software Developers (Providers):

Question: "What advanced technologies and strategies should we implement to achieve near-continuous availability of the AI system and reduce the likelihood of downtime?"

Coach Training Organizations:

Question: "How should we prepare future coaches to manage client expectations regarding system availability and to respond effectively during instances of system downtime?"

## 6.13 F.13 Technical Factors: Resilience and Accessibility Overview

### 6.13.1 Element F.13.1: Data Management Disclosure to Clients

Professional Coaches:

Question: "How can I help clients understand the data management practices of the AI system, especially regarding security and confidentiality, to build their trust and confidence in using the service?"

Coaching Clients:

Question: "As a client, where can I find clear information about how the AI coaching system manages my data, including security and confidentiality aspects?"

Organizations Purchasing Coaching:

Question: "What should we look for in the AI system's data management disclosure to ensure it is comprehensive, clear, and assists clients in understanding security and confidentiality practices?"

Coaching Supervisors:

Question: "How can I ensure that clients receive and understand detailed information about the AI system's data management practices, including security and confidentiality measures?"

Software Developers (Providers):

Question: "What should be included in a detailed guide on data management practices for our AI system and how can we make this information easily understandable for clients?"

Coach Training Organizations:

Question: "How should we prepare future coaches to communicate the AI system's data management practices to clients, ensuring they understand and trust the system's security and confidentiality protocols?"

### 6.13.2 Element F.13.2: Consent for Data Processing

Professional Coaches:

Question: "How can I ensure that clients are fully informed and provide explicit consent for the AI system's data processing activities, and what should they understand about the scope and purpose of this data usage?"

Coaching Clients:

Question: "As a client, how will the AI system obtain my consent for data processing, and what options will I have for controlling how my data is used?"

Organizations Purchasing Coaching:

Question: "What standards should we require for an interactive consent process in AI coaching systems, ensuring clients have comprehensive understanding and control over their data processing?"

Coaching Supervisors:

Question: "How can I oversee the consent process for data processing in AI coaching systems to ensure it is thorough, clear, and respects client autonomy?"

Software Developers (Providers):

Question: "What features should we include in the AI system to create an interactive, detailed consent process for data processing, offering clients granular control over their data?"

Coach Training Organizations:

Question: "How should we prepare future coaches to guide clients through the data processing consent process in AI systems, ensuring clarity and respect for client preferences?"

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