Global Certificate in Cyber Psychology

Human-Computer Interaction

Affordance: The actionable properties of an object or environment that enable specific interactions, perceived by users through design cues. For instance, a button affords pressing.

Agile Development: An iterative and incremental development methodology that emphasizes flexibility, customer collaboration, and continuous improvement.

Algorithm: A step-by-step procedure for solving a problem or accomplishing a task, typically used in computing and programming.

Artificial Intelligence (AI): The simulation of human intelligence in machines that are programmed to think like humans and mimic their actions, such as reasoning, learning, problem-solving, perception, and language understanding.

Augmented Reality (AR): An interactive experience of a real-world environment where the objects that reside in the real world are enhanced by computer-generated perceptual information, sometimes across multiple sensory modalities, including visual, auditory, haptic, somatosensory, and olfactory.

Cognitive Load: The total amount of mental effort being used in the working memory.

Cyberpsychology: The scientific study of the psychological aspects of human interaction with technology, including the Internet, virtual reality, and artificial intelligence.

Design Thinking: A problem-solving approach that involves empathy, experimentation, and iteration, with a focus on user needs and perspectives.

Ergonomics: The scientific discipline concerned with the understanding of interactions among humans and other elements of a system, and the profession that applies theory, principles, data, and methods to design in order to optimize human well-being and overall system performance.

Expertise: The state of being highly skilled or knowledgeable in a particular field, often requiring extensive training and experience.

Gamification: The use of game design elements and game principles in non-game contexts.

Haptic Feedback: The use of the tactile sense in human-computer interaction, providing users with a sense of touch through vibrations, forces, or motions.

Human-Computer Interaction (HCI): The study of how people interact with computers and to what extent computers are able to meet their needs and expectations.

Information Architecture (IA): The art and science of organizing and structuring information in a way that

supports usability and findability.

Intelligent User Interface (IUI): A user interface that can adapt to the user's needs, preferences, and context, using AI techniques such as machine learning and natural language processing.

Interaction Design (IxD): The practice of designing interactive digital products, environments, systems, and services.

Machine Learning (ML): A subset of AI that involves the use of statistical techniques to enable computers to improve at tasks with experience.

Natural Language Processing (NLP): A field of AI that focuses on the interaction between computers and human language, enabling computers to understand, interpret, generate, and make sense of human language in a valuable way.

Personalization: The process of tailoring the user experience to individual users, taking into account their preferences, behaviors, and context.

Usability: The ease of use and learnability of a product, system, or service, often measured in terms of effectiveness, efficiency, and satisfaction.

User-Centered Design (UCD): A design philosophy that puts the user at the center of the design process, involving them in every stage of the design lifecycle.

User Experience (UX): The overall experience of a person using a product, system, or service, including their perceptions, responses, and behaviors.

User Interface (UI): The space where interactions between humans and machines occur, typically consisting of visual elements such as buttons, menus, and text, as well as tactile and auditory elements.

Virtual Reality (VR): A simulated experience that can be similar to or completely different from the real world, generated by a computer, and presented to the user in such a way that the user suspends belief and accepts it as a real environment.

Web Accessibility: The design and development of websites, tools, and technologies that are accessible to people with disabilities, including visual, auditory, motor, and cognitive disabilities.

These terms represent a sample of the concepts and terminology related to Human-Computer Interaction in the context of the Global Certificate in Cyber Psychology. Understanding these terms is crucial for designing and implementing effective and usable technology that meets the needs and expectations of users, while also taking into account the psychological and social implications of technology use. By incorporating user-centered design principles, AI techniques, and cyberpsychological insights, designers and developers can create technology that is not only functional and efficient but also engaging, accessible, and meaningful.