UXQCC

Certified Professional for Usability Engineering and User Experience Design – Foundation Level

Glossary Terms V3.4 EN

Term	Brief Explanation
Cognitive walkthrough	Based on an existing task analysis and the tasks deconstructed into their subtasks, the project team (designers, developers ...) "walks" through the system - step by step according to the deconstructed tasks from the task analysis - and in the process checks a set of questions repeatedly
Color associations	Colors are usually associated with attributes, like love, passion and many others. There is great diversity in the use of colors and their associations between cultures and even within the same culture in different time periods.
Color vision impairments	Color vision impairment or color vision deficiency is the inability to distinguish certain shades of color. The term "color blindness" is also used to describe this visual condition, but very few people are completely color blind
Comparative competitor analysis	Users today use numerous systems, from the use of which they gain experience, which they then apply to the handling of another system. This can be advantageous or disadvantageous. It is therefore crucial to know about systems that could potentially have an influence, in order to make sure that their effect is positive. Correspondingly influencing systems can be systems from a similar subject area (e.g. accounting programs), systems that use similar concepts (e.g. product search in online shops), or directly embedded modules (e.g. interactive city maps).
Competitive advantages	A competitive advantage is an advantage over competitors gained by offering consumers greater value that justifies higher prices
Cones	Cone cells, or cones, are photoreceptor cells in the retinas of vertebrate eyes (humans).
Conformity with user expectations	Conformity to user expectations demands that an application behaves as users expect it to do. This principle goes beyond mere consistency, because it is not restricted to the computer systems but also connects the application to the real world
Constructive interaction	With this method, two persons solve tasks together with the system/prototype. The interaction or discussion between the persons is in the focus of the observation. This is often very helpful to understand motivations or reasons for actions. With the method it is especially important to make sure that both persons act and not only one. Frequently used for children and seniors.

Context analysis	The usability of a system or its user experience is largely dependent on the context in which it is used. Only if the different contexts of use are known can the system be optimized in this respect. Context factors include the external, physical context (light, temperature, etc.), the psychological context (stress, privacy, motivation, etc.), as well as the personal physical context (sitting position, movement, freedom of hands, etc.).
Context of use	The Context of Use is the actual conditions under which a given (software) product is used, or will be used in a normal day-to-day usage situation.
Controllability	Controllability is one of the dialogue principles for user friendly design described in the standard ISO 9241-110
Cost reduction	Cost reduction is the process used by companies to reduce their costs and increase their profits
CUSQ	The CUSQ surveys the subjective satisfaction of users with a system. Users answer a standard questionnaire.
Data quality	Data quality refers to the state of qualitative or quantitative pieces of information. Data is generally considered high quality if it is fit for its intended uses in operations, decision-making and planning.
Design principles	Design principles are widely applicable laws, guidelines, biases and design considerations that designers apply.
Deuteranomaly	Reduced sensitivity to green light (the most common form of color blind-ness)
Deuteranopia	Deuteranopia (also called green-blind). In this case, the medium wavelength sensitive cones (green) are missing at all. Effected people cannot perceive the color green.
Dichromats	Dichromats can only distinguish two fundamental colors
Dynamic vision	Dynamic vision or dynamic visual acuity describes the ability to visually resolve subtle spatial details of an object when the object, the observer, or both, are moving.
Effects of color	Colors evoke associations and create an emotional and psychological effect.
Efficiency	Efficiency is the quality of being able to do a task successfully, in a resource saving way
Environmental influences	Environmental influences can in some cases considerably reduce the performance efficiency of humans. It is therefore important to know under which conditions an interface will be used.
Error tolerance	Error tolerance is the design of things to be resilient to human error.
Evaluation	. The assessment of the quality of use of a system from the users perspective
Experience	An event or occurrence which leaves an impression on someone.
Eye tracking	Eye-tracking is the recording of a person's eye movements, which mainly consist of fixations (points that are looked at closely), saccades (rap-id eye movements) and regressions (jumping backwards).

Focus group	A focus group is a strictly moderated discussion following a given agenda in order to address predefined questions
Formative evaluation	"Formative evaluation" refers to an evaluation accompanying the development process, which is intended to contribute to improving the quality of the product
Fundamental colors	The three fundamental (or primary) colors are red, green and blue.
Gestalt principles	Gestalt Principles are principles/laws of human perception that describe how humans group similar elements, recognize patterns and simplify complex images
Hardware ergonomics	Hardware ergonomics adapts tools (input and output devices) for human-computer interaction to the physiological characteristics of the human being.
HCI	Human–computer interaction
Heuristic evaluation	Heuristics (finding, discovering) describes the art of arriving at good solutions with limited knowledge ("incomplete information") and little time. It describes an analytical procedure that uses limited knowledge about a system to draw conclusions or make statements about the system with the help of predefined quality criteria.
High-fidelity prototype	A high-fidelity prototype (sometimes referred as high-fi or hi-fi) prototype is a computer-based interactive representation of the product in its closest resemblance to the final design in terms of details and functionality.
Horizontal prototype	Horizontal prototype: if possible, all functions are integrated, but not functional (mostly used for testing user interfaces).
Human–computer interaction (HCI)	Human–computer interaction (HCI) studies the design and use of computer technology, focused on the interfaces between people (users) and computers. Researchers in the field of HCI observe the ways in which humans interact with computers and design technologies that let humans interact with computers in novel ways
Increase in productivity	Increased productivity means that your workers are putting out products more quickly or completing services at a more rapid rate than before.
International norms	ISO-Norms (International norms) are developed by the International Standardization Organization (ISO) and are often adopted at European or national levels.
ISO	The International Organization for Standardization
IsoMetrics	This is a software evaluation procedure based on ISO 9241-110; there are two versions of the ISO-Metrics procedure, a long and a short version
Iterative design	Iterative design is a design methodology based on a cyclic process of prototyping, testing, analyzing, and refining a product or process.
Joy of Use	The use of a product should trigger a feeling of "Joy of Use".
Lean UX	Lean UX is focused on the experience under design and is less focused on deliverables than traditional UX.
Low fidelity prototype	Low-fidelity prototypes only have low similarity to the final product and are being used to test the usefulness of the idea.

Memorability	The concept of memorability, within the usability context, is that a user can leave a program and, when he or she returns to it, remember how to do things in it.
mental models	Mental models are assumptions by user about how a user interface will function. These assumptions are mostly based on experiences users have made with similar systems.
MMI	Man-machine interface or user interface
monochromats	Monochromats can only distinguish between light and dark.
Objectivity	Quality criterium for empirical data, meaning that the data is independent from subjective, uncontrollable influences
Optical illusions	An optical illusion is an illusion caused by the visual system and characterized by a visual percept that arguably appears to differ from reality.
Optical limitations	Limitations of human eyes result in poor perception of reality
Paper prototype	Paper Prototyping is a technique that consists of creating hand drawings (or printouts) of user interfaces in order to enable them to be rapidly designed, simulated and tested.
Parallel design	With the parallel design technique, several people create an initial design from the same set of requirements. Each designer works independently and, when finished, shares his or her concepts with the group. Then, the design team considers each solution, and each designer uses the best ideas to further improve their own solution
Participatory design	An approach to design that invites all stakeholders (e.g. customers, employees, partners, citizens, consumers) into the design process as a means of better understanding, meeting, and sometimes preempting their needs.
Persona	Personas are archetypical users whose goals and characteristics represent the needs of a larger group of users. Persona representations include behavioral patterns, goals, motivations, skills, attitudes, and background information, as well as the environment in which a persona operates.
Perspective taking	The term "perspective taking" comes from psychology and describes the ability to understand a certain situation from another person’s perspective.
Product lifecycle	Product life cycle (PLC) is the cycle through which every product goes through from introduction to withdrawal or eventual demise.
Protanomaly	Reduced sensitivity to red light.
Protanopia	Insensitivity to red light.
Qualitative usability goals	Qualitative goals are helpful to guide the interface design, especially in the initial phase. They result from the requirements derived from the user pro-files and from the context-related task analysis
Quality in use	1. Users' impression of the quality of a software product. 2. The capability of the software product to enable specified users to achieve specified goals with effectiveness, productivity, safety and satisfaction in specified contexts of use.

Quantitative usability goals	The achievement of qualitative objectives is often difficult to precisely define. In contrast, additionally defined quantitative goals are more objective and can be measured more accurately
QUIS	QUIS is a questionnaire that exclusively records the subjective satisfaction of users with the interface of a system.
Receptor cells	Types of photoreceptor cells in mammalian eyes: The two classic (relevant for UX) photoreceptor cells are rods and cones, each contributing information used by the visual system to form a representation of the visual world, sight.
Reliability	The degree to which the result of a measurement, calculation, or specification can be depended on to be accurate.
Rods	Rods or rod cells are photoreceptor cells in the retina of the eye that can function in lower light better than the other type of visual photoreceptor, cone cells. Rods are usually found concentrated at the outer edges of the retina, are used in peripheral vision, and can only perceive shades of grey.
Satisfaction	How satisfying it is to use the design.
Scenario prototype	All functions for a specific task are simulated using a combination of vertical and horizontal prototypes.
Self-descriptiveness	An object or an interface is self-descriptive if users realize what they can do with it, and how they can do it.
Social rules	Social rules or norms are unwritten rules about how to behave. They provide us with an expected idea of how to behave in a particular social group or culture
Software ergonomics	Software ergonomics aims at adapting to the cognitive abilities of humans or their ability to process information. It describes and evaluates user interfaces for human-computer interaction.
Static vision	Static vision or static visual acuity: Static visual acuity is defined as the ability to distinguish the details of static objects whose image is formed on the retina without changing position.
Style guides	Style guides provide clear guidelines for the design of printed media, software user interfaces and web applications of a company. They range from concrete guidelines for manufacturer platforms or operating systems to individual guidelines for individual providers, which are specifically oriented to their corporate design.
Suitability for individualization	Suitability for individualization is one of the dialogue principles for user-friendly design described in the standard ISO 9241-110. The ability to individualize complex products is important for users. Meaning that users can adapt the product to their own needs.
Suitability for learning	Suitability for learning is one of the dialogue principles for user friendly design described in the standard ISO 9241-110. When it is necessary to learn how to use certain functions of a product, his should be as easy as possible.

Suitability for learning (learnability)	Learnability: How easy is it for users to accomplish basic tasks the first time they encounter the design?
Suitability for the task	Suitability for the task is one of the dialogue principles for user friendly design described in the standard ISO 9241-110. Suitability for the task describes how reasonable something is in order to complete a specific task. For example, you could sweep the floor with a toothbrush. However, the toothbrush is not as suitable for the task, as a bigger brush would be much more appropriate for this task.
SUMI	SUMI is a questionnaire used to measure the quality of use of software from the user's perspective
Summative evaluation	The term "summative evaluation" refers to a final evaluation against specified benchmarks.
SUS	SUS is a "quick & dirty", but still reliable questionnaire to have the subjective usability of a system (hardware, software, websites, mobile devices) assessed by users
Target group relevance	Describes the relevance a specific feature does have for a target group. Target groups are individuals or groups (families, teams, organizations) that generally live in a geographically circumscribed area.
Task analysis	In most cases, users have concrete tasks in mind when they use a system (looking for concrete content, buying something, communicating, etc.). Task analysis is aimed at identifying these concrete tasks so that they can then be optimally represented in the system. Every task analysis method is based on breaking down the respective task into its individual components (subtasks).
Teach-back	The system is explained to one person, who is then asked to explain the operation and functionality of the system to the other person, who is not familiar with the system. If necessary, the person may also help to solve given tasks with the system
Thinking aloud	While performing a task, the user is encouraged to "think aloud", i.e. to comment on his actions and motives
Trichromats	Can see all three fundamental colors
Tritanomaly	Reduced sensitivity to blue light (extremely rare)
Tritanopia	Tritanopia – Blue-Yellow Color Blindness
UCD analysis	The four phases of user-centered design are analysis, implementation, testing and evaluation.
Universal design	Universal Design is the design and composition of an environment so that it can be accessed, understood and used to the greatest extent possible by all people
Usability	Usability is a quality attribute that assesses how easy user interfaces are to use. The word "usability" also refers to methods for improving ease-of-use during the design process.
Usability	ISO defines usability as "The extent to which a product can be used by specified users to achieve specified goals with effectiveness, efficiency, and satisfaction in a specified context of use."

Usability engineering lifecycle	The Usability Engineering Lifecycle documents a structured and systematic approach to addressing usability within the product development process. It consists of a set of usability engineering tasks applied in a particular order at specified points in an overall software development lifecycle.
Usability engineering process	In the course of the usability engineering process, data is collected using a variety of methods. It is essential to assess the quality of the data, as incorrectly collected or interpreted data can have a sustained negative impact on the development of interactive systems or drive the development in the wrong direction.
Usability test	Usability testing usually consists of a "package" in which future users perform precisely defined tasks in a system or on prototypes. They are observed and their actions are analyzed and interpreted
Use case	Use cases, on the other hand, describe the use from the perspective of the application. They facilitate the addressing of concrete processes. These de-scribe the steps that a user performs for the specific task of an application and the way in which the application reacts to the user's actions. Use cases are used to describe the interaction processes and evaluate them with regard to their priority.
User analysis	All characteristics of the users that can or might have an influence on the usage (eyesight, body height, expertise, affinity for technology, etc.) are collected
User Experience	User experience is about how a user interacts with, and experiences, a product. It is a person's emotions and attitudes about using a particular product, system or service.
User Experience (UX)	User Experience - as a supplement to Usability - not only represents the user's experience with the product itself, but a holistic approach with all experiences that are in any way related to this product.
User Experience engineering process	The traditional usability engineering process involves activities, methods and procedures that are designed to achieve purpose-built, function-oriented systems for clearly defined requirements in terms of their usage quality.
User interface	The means by which the user and a computer system interact, in particular the use of input devices and software.
User scenario	User scenarios show how users perform tasks in a specific context. They give examples of the different usage of devices and applications and form a basis for subsequent usability tests. For these scenarios, the tasks, goals and motivations of a user must be determined
User-centered design	User-centered design (UCD) is an iterative design process in which designers focus on the users and their needs in each phase of the design process.
UX	User Experience - as a supplement to Usability - not only represents the us-er's experience with the product itself, but a holistic approach with all experiences that are in any way related to this product.

Validity	Validity is the extent to which a concept, conclusion or measurement is well-founded and likely corresponds accurately to the real world.
Vertical prototype	Reduction to a few individual but detailed functions.
Wireframe	A wireframe is the schematic representation of a website. The wireframe (or wireframe model) serves to illustrate and plan elements that are to be pre-sent on a website. The basic elements of a page are shown, which initially has nothing to do with the design of the website.