

Overview

User-centred development (UCD) is a framework of processes in which the needs, wants, and limitations of end users of a system or service are captured and prioritised and used to drive each stage of the development process to facilitate responsive delivery.

User-centred development not only requires developers to analyse how users are likely to use a digital service or product, but also to test their assumptions with regard to user behaviour in real world tests with actual users at each stage of the development process. This includes building in feedback loops from initial requirements definition, design, development and testing to confirm or modify the original requirements.

User requirements are established and refined through investigative methods including: ergonomic considerations, functional and non-functional needs, prototype testing, and usability testing methods.

User-centred development aims to optimise the software development and delivery system around how users can, want, or need to use the system, rather than forcing the users to change their behaviour to accommodate system.

This standard covers the competencies needed to implement the infrastructure to support user centred development activities.

Performance criteria

You must be able to:

1. research user needs to identify the context of use and what user features and interactions are required in digital services and products
2. use sketching, wire framing, visualisation and prototyping techniques to design appropriate digital interface solutions
3. use early prototypes in order to help evaluate the user requirements for the system
4. use the defined tools to produce end-to-end visual and conceptual prototypes
5. plan and conduct testing sessions to affirm user design decisions
6. collect feedback on the developing design from end users to validate the design as it progresses through development
7. work with developers that are implementing the designs to ensure that they are interpreted correctly
8. perform usability testing to confirm that the final design of digital services and products meets user needs

Knowledge and understanding

You need to know and understand:

1. what is meant by user research, user centred design and human computer interaction (HCI)
2. how user-centred development activities fit into the system development process
3. how to communicate design ideas quickly using sketching, wire framing visualisation and prototyping techniques to demonstrate how user requirements are met
4. how to work within the full context of a user's experience
5. what the defined tools for user centred development are and how to apply them
6. the need to firm up ideas in order to present ideas to users and colleagues
7. what are the organisational policies and standards and how to apply them
8. how to apply usability testing with end users to gather and observe feedback on the prototype to iterate and improve
9. the difference between testing software designs and end point usability testing

Implement user centred development infrastructure processes

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