

23 Lecture - CS408

Important Subjective

What are requirements in the context of Human-Computer Interaction (HCI)?

Answer: Requirements in HCI refer to the functionalities, features, and characteristics that a computer system should possess in order to meet the needs and expectations of its intended users.

Why are requirements important in the HCI design process?

Answer: Requirements are important in the HCI design process as they serve as a blueprint that guides the development team in creating user-centric interfaces. They help in defining the scope of the design project, clarifying goals and objectives, and identifying constraints and limitations.

How are requirements gathered in the HCI design process?

Answer: Requirements are gathered through various methods such as interviews, surveys, observations, and usability testing. It is important to involve the intended users of the system in the requirements gathering process to ensure that their needs and expectations are captured accurately.

What is the role of prioritization in requirements analysis in HCI?

Answer: Prioritization is important in requirements analysis as it helps in identifying the key functionalities and features that are essential for the success of the system. It helps in making informed decisions about what features to include or exclude from the design, considering factors such as technical feasibility, cost, and time constraints.

Why is it important to specify requirements in a clear and unambiguous manner?

Answer: It is important to specify requirements in a clear and unambiguous manner so that they can be understood by all stakeholders, including the design team, developers, and other relevant parties. Clear and unambiguous requirements help in ensuring that the design and development process is based on accurate information.

How do requirements influence the design of the user interface in HCI?

Answer: Requirements serve as a guideline for the design team to create mockups, prototypes, and other design artifacts that reflect the intended functionality and behavior of the system. The requirements help in making design decisions, such as layout, navigation, and interaction patterns, that align with the users' needs and expectations.

What is the role of requirements in evaluating the success of the interface in HCI?

Answer: Requirements serve as a benchmark against which the performance of the system can be measured. Usability testing and other evaluation methods are conducted to validate whether the interface meets the defined requirements and whether it is usable and effective for the intended users.

How can deviations or gaps between requirements and the actual interface be addressed in HCI?

Answer: Deviations or gaps between requirements and the actual interface can be addressed during the evaluation process. Feedback from usability testing and other evaluation methods can help in identifying areas where the interface falls short of meeting the defined requirements, and necessary changes can be made to align the interface with the requirements.

Why is a user-centered approach important in gathering requirements in HCI?

Answer: A user-centered approach is important in gathering requirements in HCI as it ensures that the needs and expectations of the intended users are captured accurately. Involving users in the requirements gathering process helps in designing interfaces that are user-friendly, efficient, and effective.

How can well-defined requirements contribute to the success of HCI design projects?

Answer: Well-defined requirements provide a clear vision of what the system is expected to achieve and serve as a reference point throughout the design and development process. They help in clarifying goals, identifying constraints, making informed design decisions, and evaluating the success of the interface, all of which contribute to the overall success of HCI design projects.