

# 25 Lecture - CS408

## Important Subjective

**What is design synthesis in the context of Human Computer Interaction (HCI)?**

Answer: Design synthesis in HCI refers to the process of integrating and interpreting data collected from user research methods to generate meaningful design insights, concepts, and solutions for designing user interfaces.

**Why is design synthesis important in the user-centered design process?**

Answer: Design synthesis is important in the user-centered design process as it helps designers gain a deeper understanding of user needs, preferences, and expectations, and generates design solutions that are aligned with users' mental models and interactions.

**What are the key steps involved in design synthesis?**

Answer: The key steps in design synthesis include data analysis, concept generation, concept evaluation and refinement, and creation of design artifacts to communicate and visualize design ideas.

**How does design synthesis promote creativity and innovation in the design process?**

Answer: Design synthesis encourages designers to think beyond the obvious and explore new possibilities, leading to unique and innovative design solutions that can differentiate a product or service in a competitive market.

**What is the role of user feedback in design synthesis?**

Answer: User feedback plays a crucial role in design synthesis as it helps designers validate and refine design concepts through iterative iterations, ensuring that the final design is well-aligned with user needs and preferences.

**How can design synthesis minimize the risk of design failures?**

Answer: By involving users early on in the design process and integrating their feedback, design flaws, usability issues, and potential problems can be identified and addressed, reducing the risk of design failures in the final product.

**What are some common design artifacts created during design synthesis?**

Answer: Design artifacts such as personas, scenarios, storyboards, and design frameworks are commonly created during design synthesis to communicate and visualize design concepts to stakeholders and team members.

**How does design synthesis contribute to a user-centric approach in design?**

Answer: Design synthesis ensures that user needs and preferences are at the forefront of the design process, resulting in interfaces that are aligned with the users' mental models, cognitive abilities, and interactions, leading to a user-centric design approach.

**What are some criteria used for evaluating design concepts during design synthesis?**

Answer: Usability, feasibility, desirability, and effectiveness are some common criteria used for evaluating design concepts during design synthesis.

**Why is design synthesis considered a crucial step in the overall user-centered design process?**

Answer: Design synthesis bridges the gap between user research and ideation, helping designers generate meaningful design solutions that are grounded in user needs, behaviors, and preferences, making it a crucial step in the overall user-centered design process.