# 6 Lecture - CS408

## **Important Mcqs**

Which cognitive framework explains how humans process information in stages, including perception, attention, memory, and decision-making?

- A. Mental Models theory
- B. Information Processing Model
- C. Theory of Visual Attention
- D. Dual-Coding Theory

**Answer: B. Information Processing Model** 

#### What does the Gulf of Execution refer to in HCI?

- A. Gap between users' intentions and actions
- B. Gap between system's feedback and user's interpretation
- C. Gap between users' prior knowledge and system's behavior
- D. Gap between visual and verbal information processing

Answer: A. Gap between users' intentions and actions

### What does the Theory of Visual Attention study in the context of HCI?

- A. How humans process and store visual and verbal information
- B. How users develop mental representations of system behavior
- C. How humans allocate attention to visual stimuli
- D. How users perceive and interpret system feedback

Answer: C. How humans allocate attention to visual stimuli

#### What does the Dual-Coding Theory explain in the context of HCI?

- A. How users develop mental representations of system behavior
- B. How humans allocate attention to visual stimuli

- C. How humans process and store visual and verbal information
- D. How users perceive and interpret system feedback

#### Answer: C. How humans process and store visual and verbal information

# Which cognitive framework suggests that users develop mental representations of how a system works based on their prior knowledge and experiences?

- A. Mental Models theory
- B. Information Processing Model
- C. Theory of Visual Attention
- D. Dual-Coding Theory

**Answer: A. Mental Models theory** 

#### What is the Gulf of Evaluation in HCI?

- A. Gap between users' intentions and actions
- B. Gap between system's feedback and user's interpretation
- C. Gap between users' prior knowledge and system's behavior
- D. Gap between visual and verbal information processing

#### Answer: B. Gap between system's feedback and user's interpretation

#### How can cognitive frameworks be applied in the design of user interfaces in HCI?

- A. By considering factors such as perception, attention, memory, decision-making, and mental models of users
- B. By aligning with users' intentions and actions
- C. By optimizing the use of visual and verbal elements
- D. By providing clear feedback and intuitive navigation

# Answer: A. By considering factors such as perception, attention, memory, decision-making, and mental models of users

#### Which cognitive framework studies how humans allocate attention to different visual stimuli?

A. Mental Models theory

- B. Information Processing Model
- C. Theory of Visual Attention
- D. Dual-Coding Theory

## **Answer: C. Theory of Visual Attention**

### Why is understanding users' mental models important in HCI?

- A. To optimize the use of visual and verbal elements
- B. To minimize the Gulf of Execution
- C. To align with users' expectations and prior knowledge
- D. To provide clear feedback and intuitive navigation

#### Answer: C. To align with users' expectations and prior knowledge

#### What does the Dual-Coding Theory suggest in the context of HCI?

- A. How users develop mental representations of system behavior
- B. How humans allocate attention to visual stimuli
- C. How humans process and store visual and verbal information
- D. How users perceive and interpret system feedback

#### Answer: C. How humans process and store visual and verbal information