10 Lecture - CS408

Important Mcqs

What is perception in the context of HCI?

- a) The ability to recall information
- b) The process of interpreting sensory cues
- c) The ability to reason logically
- d) The process of decision-making

Solution: b) The process of interpreting sensory cues

Which of the following is NOT a type of attention in HCI?

- a) Selective attention
- b) Divided attention
- c) Passive attention
- d) Sustained attention

Solution: c) Passive attention

What is the role of memory in HCI?

- a) To encode and store information
- b) To make decisions based on sensory cues
- c) To reason logically
- d) To allocate attention to relevant information

Solution: a) To encode and store information

Problem-solving and decision-making are examples of:

- a) Perceptual processes
- b) Memory processes

- c) Attentional processes
- d) Cognitive processes
- Solution: d) Cognitive processes

Reasoning in HCI involves:

- a) Recalling information from memory
- b) Allocating attention to relevant information
- c) Interpreting sensory cues
- d) Logical thinking and drawing conclusions

Solution: d) Logical thinking and drawing conclusions

Cognitive load theory suggests that:

- a) Users have unlimited cognitive resources
- b) Cognitive load should be increased to optimize user performance
- c) Cognitive load should be minimized to optimize user performance
- d) Cognitive load is not relevant in HCI

Solution: c) Cognitive load should be minimized to optimize user performance

What are mental models in HCI?

- a) Cognitive resources used for problem-solving
- b) Cognitive representations of how a system works
- c) Sensory cues used for decision-making
- d) Memory processes for encoding information

Solution: b) Cognitive representations of how a system works

Challenges of cognitive processes in HCI include:

- a) Varying cognitive abilities among users
- b) Limitations of working memory
- c) Distractions in the interface

d) All of the above

Solution: d) All of the above

How can designers leverage cognitive processes to improve interface design?

- a) By increasing cognitive load to challenge users
- b) By aligning with users' mental models
- c) By overloading working memory with information
- d) By ignoring users' perception and attentional processes

Solution: b) By aligning with users' mental models

Why is understanding cognitive processes important in HCI?

- a) To make interfaces visually appealing
- b) To challenge users' cognitive abilities
- c) To create user-friendly and efficient interfaces
- d) To ignore users' cognitive limitations

Solution: c) To create user-friendly and efficient interfaces