9 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

These multiple-choice questions provide a brief overview of the cognitive processes and their significance in the field of Human Computer Interaction. Further exploration and understanding of these processes can lead to improved interface design and better user experiences.