HUMCOM1 – IAA2

## 1. What Is Cognition? Why it is important in interaction design?

Thinking, remembering, learning, daydreaming, decision-making, seeing, reading, talking, writing, and perceiving are all examples of cognition.

2. Explain what are mental models.

Mental models are users who learn about and utilize a system to gain a better grasp of it. The term "metal model" is sometimes used to refer to a mental model..

## 3. What are the Cognitive processes?

a. Attention

b. Perception

c. Memory

d. Learning

e. Reading, speaking and listening

f. Problem-solving, planning, reasoning and decision-making

## 4. What are the different design implications?

a. Design implications for attention

-Context: Make information salient when it needs to be attended to at a given stage of a task

-Avoid cluttering visual interfaces with too much information

b. Design implications for Perception

-Icons should enable users to distinguish their meaning readily

-Sounds should be audible and distinguishable

-Haptic feedback should be used judiciously

c. Design implications for Memory

-Reduce cognitive load by avoiding long and complicated procedures for carrying out tasks

-Design interfaces that promote recognition rather than recall

-Provide users with various ways of labelling digital information to help them easily identify it again

d. Design implications for Learning

-Design interfaces that encourage exploration

-Design interfaces that constrain and guide learners

-Dynamically linking concepts and representations can facilitate the learning of complex material

e. Design implications for Reading, speaking and listening

-Speech-based menus and instructions should be short

-Accentuate the intonation of artificially generated speech voices

-They are harder to understand than human voices

-Provide opportunities for making text large on a screen

f. Design implications for Problem-solving, planning, reasoning and decision-making

-Provide information and help pages that are easy to access for people who wish to understand more about how to carry out an activity more effectively (for example, web searching)

-Use simple and memorable functions to support rapid decision-making and planning