

Name : wasim akram

Id : 11758

Paper: HCI

Q1:

a): What is the main aim of the Don Norman's Book (The Design of Everyday things)?

Don Norman's Door Example

- A classic book. Read it!
- Main Point: no one reads manuals, so things should be designed so that manuals are not needed
- BTW what is wrong with the kettle on the book cover?
- A plate naturally says " push me" and a handle naturally says "pull me "
- When Don Norman's advice is not followed

b): Explain Deductive and Abductive reasoning with examples.

- Ans : Deduction:
  - General to particular
  - Derive logically necessary conclusion from given premises.

e.g. If it is Friday then he will go to work

It is Friday

Therefore he will go to work.

- Abdicative: reasoning from event to cause

e.g. Sam drives fast when drunk.

If I see Sam driving fast, assume drunk.

■ Logical conclusion not necessarily true:

e.g. Ground is wet, If it is raining.

Ground is wet

So, it is raining

■ Unreliable:

- can lead to false explanations

Q3:

- a) Differentiate slip and mistake

Ans: slip

understand system and goal

correct formulation of action

incorrect action

mistake

may not even have right goal!

Fixing things?

slip – better interface design

mistake – better understanding of system

- b) Explain self perception and object perception.

\* Object Perception: Object perception is a process by which people develop a view of objects they see. Perception may cause optical illusions of objects that we see

Ans: Self Perception is a process by which people develop a view of themselves.

It is developed from social interaction within different groups. Self-perception has three parts:

Self-concept: It refers to how someone thinks about or perceives themselves

You see yourself as a LOVEABLE and WORTHWHILE person

You feel uncertain and uncomfortable about yourself-you fear possible rejection

Self-identity is the mental and conceptual awareness of strengths and weaknesses

Self-esteem: Emotional dimension of self-perception

Positive and negative judgments people have of themselves

People with low self-esteem tend to be unsuccessful; do not adapt well to stressful events

Those with high self-esteem have the opposite experiences

Self-presentation : Behavioral strategies people use to affect how others see them

Goals of self-presentation

Affect other people's impressions to win their approval

Increase the person's influence in a situation

Ensure that others have an accurate impression of the person

Q4:

a) Write the steps involved in perceptual process.

Ans.The perceptual process is a sequence of steps that begins with the environment and leads to our perception of a stimulus and an action in response to the stimulus. This process is continual, but you do not spend a great deal of time thinking about the actual process that occurs when you perceive the many stimuli that surround you at any given moment.

Steps are:

The Environmental Stimulus

The Attended Stimulus

The Image on the Retina

Transduction

Neural Processing

Perception

Recognition

Action

b) Differentiate between perception and recognition.

Ans: Perception: Here, we actually perceive the stimulus object in the environment. It is at this point that we become consciously aware of the stimulus. Let's consider our example, in which we imagined that you were out for a morning jog in the park. At the perception stage, you have become aware of that there is something out on the pond to perceive.

Recognition: Perception doesn't just involve becoming consciously aware of the stimuli. It is also necessary for our brain to categorize and interpret what it is we are sensing.

Our ability to interpret and give meaning to the object is the next step, known as recognition.

It is at the recognition stage of the perceptual process that you realize that there is a duck floating on the water.

Q5:

a) A graphic designer, wants to design a 3d shape using Adobe Illustrator, he select a (03) shape, apply some gradient on it and then apply drop shadow effect. In the given scenario in the light of interaction identify the Goal, Problem domain and the task.

Ans. Goal: Designer wants to draw a 3d shape .

Problem: He don't know how to make a 3d effect.

b) Explain Gulf of Execution and Gulf of Evaluation.

Ans: Gulf of Execution

user's formulation of actions

≠ actions allowed by the system

Gulf of Evaluation

user's expectation of changed system state  
≠ actual presentation of this state

Analyze the following scenario and write down seven stages of action for given particular scenario for solution.

Scenario is:

Suppose I want to go to University, but the tyre of my car got punctured.  
Now I have to repair it.

Ans. Solution seven stages:

Stage 1 is Forming a Goal. This is what you want. As an example, I want to go to market, but the tyre of my car got punctured. Now I have to repair it.

Stage 2 is Forming the Intention. This is what would satisfy the goal. A repaired car would satisfy my goal of reaching the market.

Stage 3 is Specifying an Action. What do I have to do to achieve the intention? I would need to repair a car to meet the requirement set in my goal.

Stage 4 is Executing the Action. Here I would do the steps of the action. I would repair the car.

Stage 5 is Perceiving the State of the World. Using the senses to gather information. My repaired car would be able to move to the market.

Stage 6 is Interpreting the State of the World. What has changed? Punctured tyre of my car has been changed and it can move now.

Stage 7 is Evaluating the Outcome. Did I achieve my goal? I can move towards market now without worrying. I achieved my goal.