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Q.1 (a): What is the main aim of the don Norman's Book (the design of everyday things)?

ANS: The main focus of this book is on the best usability of the daily life things.it can be more elaborated through of the following points:

1. This book focuses on the principal cognitive psychology, which most of the developers are designers ignore
2. It also aims on function and control of the things we design.
3. it also says that good designs can also be developed by very simple rules to keep in mind that always make things visible to see and control.

4. In short it says that guide the user to take the right action, the right control on the right time effortlessly.

(b): explain deductive and Abductive reasoning with examples?

- Deductive reasoning:

It is a type of reasoning in which we take two premises or statements, considering them as to form a conclusion. It is just the same like  $A = C$  .

Example: 1. all cows are mammals.

2. all mammals have kidneys.

Through this we can conclude that all cows have kidneys.

- Abductive reasoning:

In general  
abductive reasoning is considering  
having a perception about some things.

Example: considering that my friend is having a non-productive cough, flu, a runny nose, sore throat and a fever of 104 degree F from the last four days, giving this best information by him you guess my friend may be infected with COVID-19 virus, but you are not completely sure are certain about it stop this is a proper example of abductive reasoning.

Q.2: analyze the following scenario and write down seven stages of action for a given particular scenario for solution?

Scenario is:

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

You are Required to right the seven stages of gulf of execution and evaluation to solve the scenario.

ANS: starting with the execution part:

1. Specifying my goal: what to do?
2. Farming intension for an act: farming the intension to cross raod and to reach the tyre repair shop.

3. Sequence of actions or taking an action to lead me to my goal: I will use the action to press the key to start the car, and cross walk signal to cross the road.
4. Executing the action: by physical action that I crossed the road.

Evaluation part:

5. Perception of the system or the world: perceiving that I am on the other side of the road to reach the shop.
6. Interpretation of perception based on your expectation: I interpret this perception and help of others to find it.

**Q3:**

**a): differentiate slip and mistake.**

**Ans: slip:**

Slip occur when a user intends to perform an action but he she ends up with doing another action or similar action causes are poor physical skill and an attention.

**Example:**

Accidently putting a liquid hand wash.

**Mistake:**

Mistake occur when user have goals but they are inappropriate for the current task or problem.

Causes are incorrect understanding of something

## **Example:**

If someone understood the petrol gauge of the car with the engine oil warning sign of the car, no matter how carefully he added the certain volume but still the problem will remain the same.

## **b) Explain Self Perception and object perception.**

### **Ans: Self-perception:**

Self-perception is a process in which people develop a view about themselves. It is developed through socialization by having interaction with different types and group of people.



## **Object perception:**

Object perception is a process in which a group of individuals develop a view of objects they see around.

It is actually an optic illusions of objects.

**Q4:**

**a) Write the steps involved in the perceptual process.**

**Answer:**

1. Environmental stimulus.
2. Attended stimulus.
3. Image of the retina
4. Transduction
5. Neural process
6. Perception

7. Recognition

8. Action

**b) Differentiate between perception and recognition.**

**Ans: perception:**

Everything that we sense, we hear, we smell, we see etc are perceived.

Example:

Let's consider an example : I am going to university by the street from my town and I perceive that there will be something on the gate when I leave town.

Recognition:

Perception does not involve becoming consciously aware of the stimuli. It is necessary for the brain to interpret and recognize what is the thing I am sensing.

### **Example:**

Keeping the above example in mind at the recognition stage of the perceptual process that I realize that I am going to face the security guard of town at the gate.

### **Q5:**

- a) a designer wants to resign a three D shape using adobe illustrator, he select a shape, apply some gradient on it an then apply drop shadow effect. In the given**

**scenario in the light of interaction  
identify the goal, problem domain  
and the task?**

**Answer:**

**Goal:**

Designing 3D shape.

**Problem domain:**

Does the graphic designer have goat the expertise in 3D designing, Because we are taking about D design and we have a graphic designer without knowing if he has the expertise in certain field of our requirements.

**Task:**

Task is depended on steps to be taken:

1. go to shapes select the shape
2. apply some gradient
3. apply some shadow effects

## **b): explain gulf of execution and gulf of evaluation?**

**Ans:**

Gulf of execution how do I know what I can do?

This lead to the concept of discoverability. In simple words when you boil something new from the market and it's the first time that you are using that item you just go using it and you are finding its features that is called discoverability which at certain time occur due to poor designing of something.

**Gulf of evaluation:**

How do I know what happened? this lead to the concept of feedback in simple word feedback can be understood as you are using a button for some action to perform an action just considered you are in a develop country, trying to cross the road you press the cross walk button and the machine is not responding by pressing the button continuously that is called as feed back