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Student : Name: _____ **Roll No.** _____
Section: _____

Instruction/Notes: No rough sheets!

1: In each of the following cases identify whether it is gulf of execution or gulf of evaluation.

a. Imagine that a user would like to record a television show. They see the solution to this problem as simply pressing the Record button. However, in reality, to record a show on a VCR, several other actions must be taken. Gulf of Execution

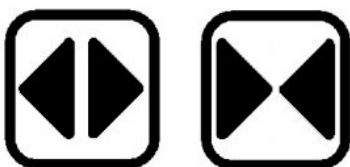
b. A user must select object and then select color to color an object in Photoshop, but the user is unable to color as he is selecting the color and then the object. Gulf of Exectuion

c. A user opens a text editor application, and saves the files after writing some text. The editor saves the files. The only way for the user to know is to check the save folder. Gulf of Evaluation

2: Your goal is to **save your sketch (drawing) in Photoshop on hard-drive**. Explain this process using seven stages of Norman's model of interaction. List all 7 stages in the right order, along with what happens in each stage.

- Setting Goal: Saving the sketch made in photo-shop on hard drive
- Intentions formulation: After completing the sketch you want to save your work
- Specify actions: Go to appropriate menu on menu bar. Select save or Ctrl+s and then you will provide desired location where the file will be saved.
- Execute actions: Point to "File" on menu bar or press Ctrl+S, select save and specify the desired location
- Perceive system state: system will give a feedback and notice the changes in system state.
- Interpret system state: From feedback you will perceive whether saving done successfully or not.
- Evaluate System state: Compare the final state with goal whether it is completed or not.

3: Consider the two symbols commonly used in elevator's control panel to open and close the door. The symbols are inviting the user to make a mistake. Without eliminating any of the functionalities that these 2 symbols provide, give a solution to minimize this kind of error. Draw you solution.



Any suitable drawing that remove or reduce the human error

- 4: Consider the following work environment analysis for an online banking application for the staff members working in the University. Using this analysis derive usability goals.

The staff members work in their own private offices. Their offices are mostly located in the most peaceful part of the university –away from the class rooms and other noise. Their offices are quite small, much like a prison cell, and this oppressive environment makes them down and depressed. All offices are air-conditioned and somewhat dark to keep away the summer heat. There are no windows. There is no team work and people avoid one another as much as possible.

Identify (at maximum 5) usability goals from this analysis. Clearly specify how you derived these goals i.e. which sentence in the analysis was used to derive the particular goal.

Goal: No dull color should be used.

Reason: Due to darkness in the offices

Goal: No extra information regarding activity is needed on screen.

Reason: As there is no interruption involve

Goal: Self-explanatory interface should be used with help material

Reason: there is No teamwork

Goal: Pleasure color should be used

Reason: as the environment is oppressive and down

Goal: They can view private information/ access to private information

Reason: As in offices are not shared so they can access private information of the organization related to them.

- 5: Specify which of Ben Schneiderman's 8 golden rules is related to each of the following statements. Also indicate (by circling) whether that principle is being violated or followed.

- a. MS Windows and all its applications uses the cross icon to dismiss/close the windows.

Principle: **Strive for consistency**

Followed or Violated

- b. When you are about to close an application with some unsaved data, the system responds "do you want to save your work".

Principle: **Support internal locus of control**

Followed or Violated

- c. The only way to save your work in a C++ editor is to right click the mouse and select save from menu.

Principle: **Seek universal usability**

Followed or **Violated**

- d. You have developed a game in which the right cursor key makes the player jump, while the up and left cursor keys makes the player go right and left respectively.

Principle: **Strive for Consistency**

Followed or **Violated**

- e. After you press the send button to send a message on a mobile phone, the next screen that you see is the home screen.

Principle: **System/informative Feedback**

Followed or **Violated**