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Sub:	USER INTERFACE DESIGN			Sub Code:	18CS734		Branch:CSE
Date:	05/12/2023	Duration:	90 mins	Max Marks:	50	Sem/Sec:	VII A,B,C

Answer any FIVE FULL Questionns

1.A	**Menu context provides information to keep the user oriented. This kind of information is critical in complex or hierarchical menu systems, where loss of position or disorientation can easily occur. So, feedback is necessary to tell users where they are in a process, what their past choices were, and possibly how much farther they still have to navigate. Explain the different ways used to provide the navigation feedback.**	[5]
	Verbal linkage, spatial linkage, or both may be used to provide navigation feedback.	
	Verbal linkage involves providing, on the current menu screen, a listing of choices made on previous menus that have led to this position. It also involves assuring the user that the displayed menu is the menu desired. Its title should mirror the option selected on the previous menu, and its content should reflect its title.	
	Spatial linkage can be accomplished by graphic methods. Each succeeding menu screen can be displayed overlap- ping the previous menu screen so a succession of choices can be seen in a single view. A sense of progress and distance can then be easily ascertained.	
1.B	**Identify the flaws in the below given menu design:**	[5]
	• More than 8 choices in menu they are large	
	• Has almost three levels and continues	
	• No proper ordering of menus(nor as per sequence)	
	• No contrast to pull down or sub menu	
	• Menu title and content is same	
2. A	**Explain the concept of keyboard equivalents and accelerators.**	[5]
	Keyboard accelerators:	
	The accelerator may be one function key or a combination of keys. Function key shortcuts are easier to learn than modifier plus letter shortcuts. Pressing no more than two keys simultaneously is preferred. Do not exceed three simultaneous keystrokes. Use a plus (+) sign to indicate that two or more keys must be pressed at the same time Accelerators should have some associative value to the item.	
	Keyboard equivalents:	
	To facilitate keyboard selection of a menu choice, each menu item should be as- signed a keyboard equivalent mnemonic. The mnemonic should be the first character of the menu item's description. Designate the mnemonic character by underlining it.	

2. B	**In the below design identify the basic mistakes in formatting and phrasing:**	[5]

- No Consistency in font size
- Color effects are very bad
- Fonts are not distinctive on button
- The Web site has no name
- Multiple search bars

3.A	**Case study:**	[5]

Social media and other easily accessible online distractions make it hard for us to stay focused on our tasks and make it difficult for us to do our work efficiently. If there is a simple App that lets us create a To-do list for all the tasks that has to be completed in day. What will be the simple UI design solution for the App. Sketch down the design solution?

Marks can be given if student consider things like

- Calendar
- To-do
- Task completed for the day
- Task yet to be complete

3.B	**Case study:**	[5]

Designer Ariel Verber recognized some pain points with booking cinema tickets in Tel Aviv, Israel, where he lives. He pointed out a tiresome ticket booking experience in his UI case study. The user had to feed all the information like movie name, time, theater, location, etc. Also, after going through the entire process, there was no guarantee of confirmed ticket booking. He picked up the most popular cinema app – Cinema City, to improve its UI/UX design for a seamless cinematic experience. So, he decided to segregate the browsing functionality into 'Search by Title' and 'Search by Time' in his new UI design. That helped the interface become simple and easier to navigate. He further reduced the cognitive load by replacing the date pickers with large buttons displaying weekdays for the current week. He introduced morning, afternoon, evening, and late-night buttons under the 'Search by Time' category. Besides each screening tab, he added beautiful graded icons showing seat availability. Lastly, payment through Apple Pay or Google Pay was the icing on the cake. Sketch the UI design.
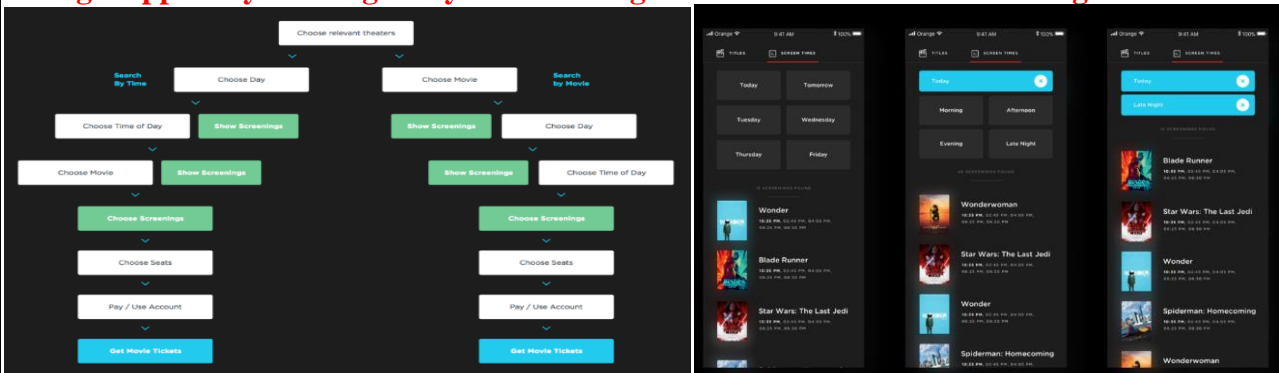
| 4. A	**In the basic window design given below, what are your observations? List at least 5 flaws.**	[5]
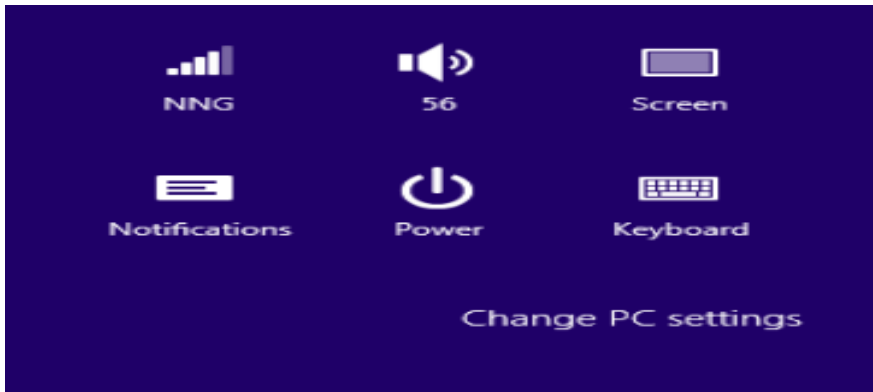
Observations

- Design for window OS

Flaws

- Low information density
- Change for settings is not a clickable command
- Icons are flat and monochromatic
- Poor distinctiveness of tab selection

4. B	**Explain the below window management technique. Give its advantages and disadvantages.**	[5]
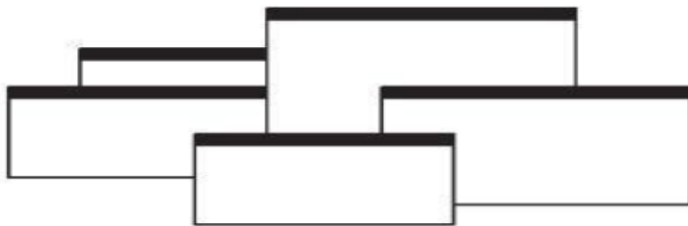
The presentation style of a window refers to its spatial relationship to other windows. There are two basic styles, commonly called tiled or overlapping. The above is the overlapping windows. Overlapping windows may be placed on top of one another like papers on a desk. They possess a three-dimensional quality, appearing to lie on different planes.

Advantages:

Visually, their look is three-dimensional, resembling the desktop that is familiar to the user

Windows can maintain larger sizes, Windows can maintain consistent sizes and positions

Screen space conservation is not a problem, because windows can be placed on top of one another

Disadvantages:

Operationally much more complex than tiled windows

Information in windows can be obscured behind other windows

Windows themselves can be lost behind other windows and be presumed not to exist

5.A	**Explain any 6 common UI Design mistakes and how to avoid them with examples.**	[6]

1. Inconsistent design

In design, consistency refers to making sure that repeatable user interactions and interface elements look and act the same.

Planning ahead of time is one of the simplest methods to keep your design consistent. Simply make a list of all of your actions and classify them into groups with comparable or identical visual elements.

2. Focusing too strongly on standing out rather than on usability

Focus more on trying to stand out or being creative than they do on the usability of their site. Rather than focusing solely on the design of your website, you need to remember to focus on things like the usability, intuitiveness, and flow of various actions

3. Confusing navigation

Confusing navigation can be a website killer. Consumers don't want to spend most of their time trying to figure out what page matches their needs and they will leave your website quickly if they decide it's too confusing.

It's important to do your research before deciding how your navigation is going to work, as this will give you insight into what your specific consumers expect from you and what aspects of navigation can be simplified for your business
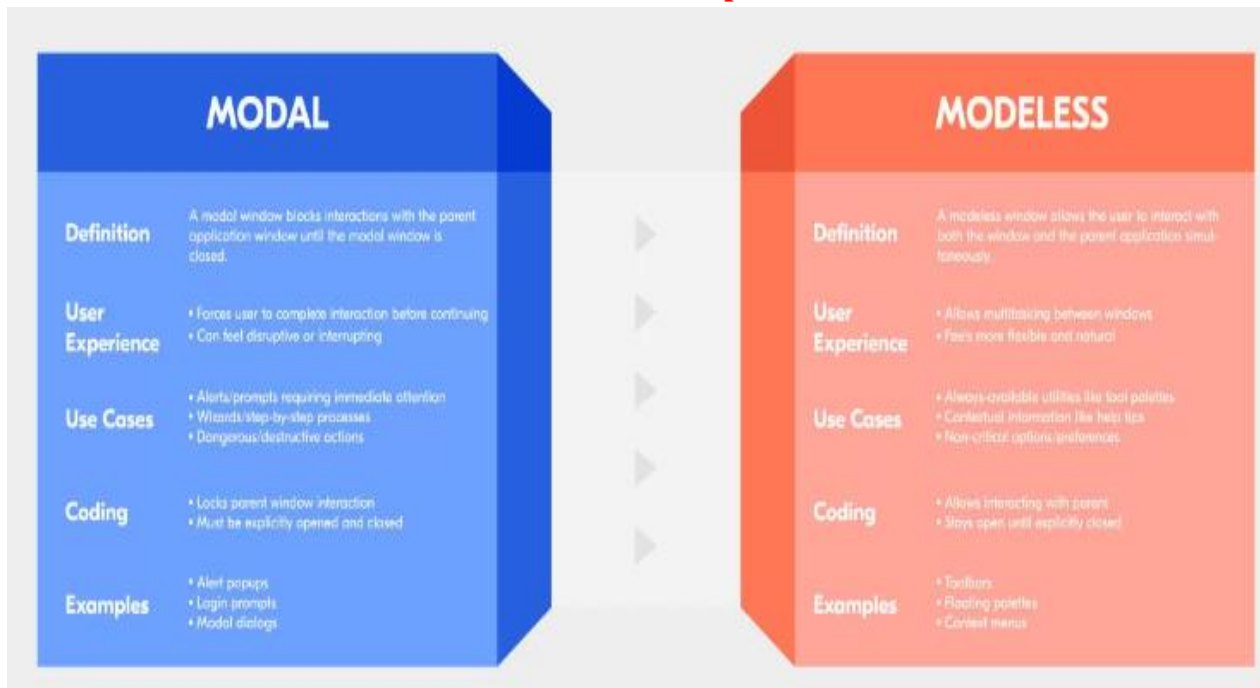
4. Too Many Words

Visitors may be oblivious to the website message if there is too much text on the page. After all, if a reader is overwhelmed by a large number of words and paragraphs, he or she will either abandon the endeavor to read or abandon the attempt after a gallant effort.

Express what you need to communicate in as few words as possible, or teach this vital rule to your client. Use more images and less text: in digital design, a picture is always worth a thousand words.

5. Failing to address your target users' needs

6. Following design trends blindly

5. B	**Differentiate modal and modeless window with examples.**	
		[4]

6. A	**What is the concept of "Frames" in the web systems? Explain with example.**	[4]
	Web systems have limited windowing capabilities. The frame concept does provide window-like ability, and JavaScript does provide pop-up windows.	
	Description:	
	Multiple Web screen panes that permit the displaying of multiple documents on a page. These documents can be independently viewed, scrolled, and updated. The documents are presented in a tiled format.	
	Proper usage: For content expected to change frequently. To allow users to change partial screen content. To permit users to compare multiple pieces of information.	
6. B	**Explain the various characteristics and capabilities of device-based controls. (any 6)**	[6]
	Trackball	
	Joystick	
	Graphic tablet	
	Light pen	
	Touch screen	
	Voice Mouse	
	Keyboard	