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Department of Computer Engineering

(Affiliated to University of Mumbai)

Subject Name		HMI		Date of Exam	01/06/2021
Subject Code		52751		Semester	VIII
Invigilator Signature	Total No. of Pages		10	Student Signature	<i>Ainsan</i>

Q2 Solve any two questions of the three.

A. Discuss different presentation styles of windows? State advantages and disadvantages of each style.

→ Presentation styles of windows refers to its spatial relationship to other windows. There are two basic styles commonly called as tiled or overlapping.

1) Tiled Windows.

- Tiled windows derive their name from common floor or wall tile.
- Tiled window appear in one plane on the screen and expand or contract to fill up the display surface, as needed.
- Most of the systems used two dimensional tiled windows, adjustable in both height and width.

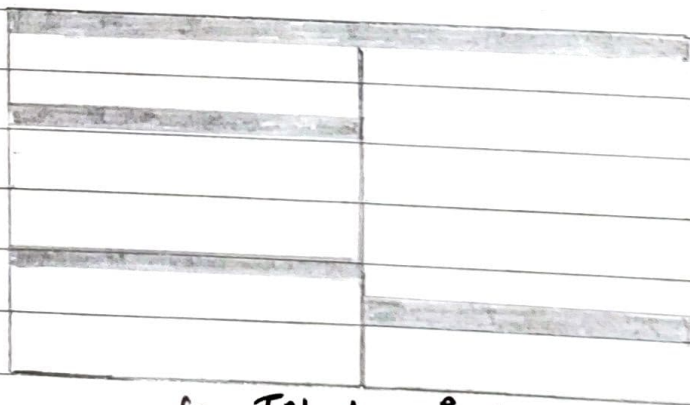


fig: Tiled windows

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o Advantages:

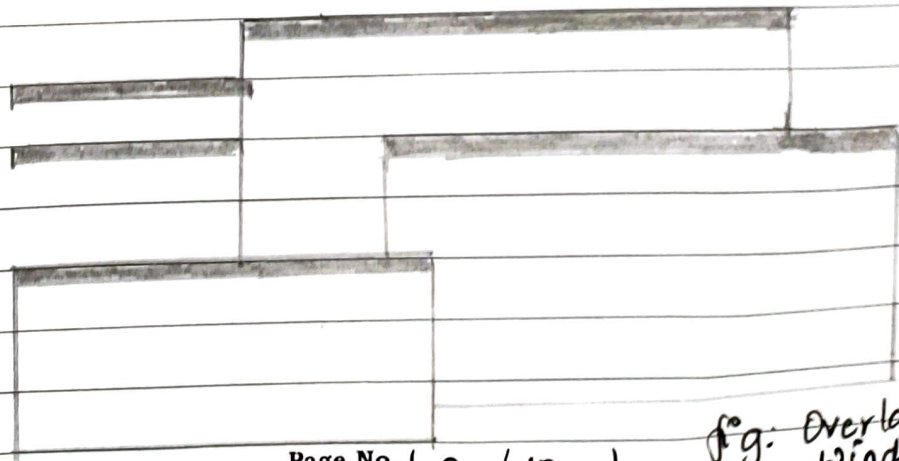
- windows are positioned automatically, easy visibility.
- Every window is visible completely losing the possibility to be hidden.
- Easy for novice or inexperienced user to use.
- Yields better user performance for tasks.

o Disadvantage:

- Limited no. can be displayed,
- As the windows open or closed the existing windows change in size deteriorating user experience.
- The windows change the size or position which can be disconcerting to the users.

2) Overlapping windows.

- Overlapping windows may be placed on one and another like pile of paper on the desk.
- 3-D Quality; appearing to lie in different planes.
- Size of overlapping windows can be altered.
- Location as well as the plane of user is controlled.



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• Advantages

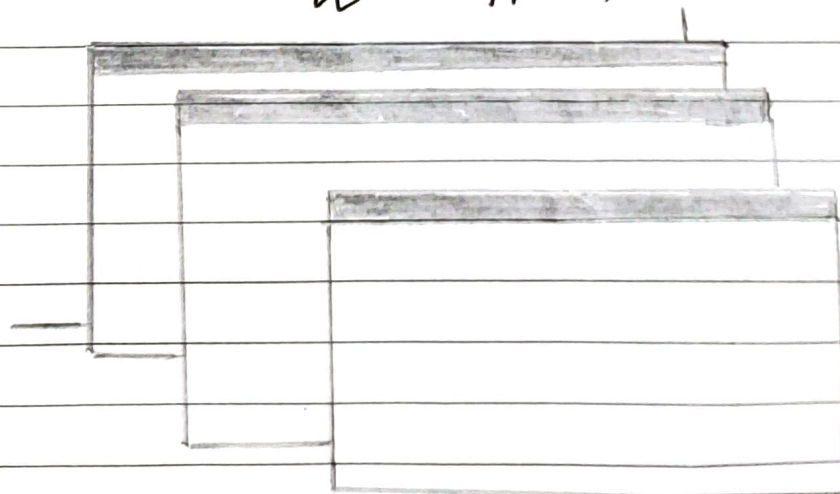
- Visually appealing.
- Great control allows user to organize windows more efficiently.
- windows are large in size, maintain positions.
- Yield better performance for tasks that require more window manipulation.
- Screen space conservation is not an issue.

• Disadvantages

- More complex to operate.
- Requires more user control and attention.
- windows may get lost behind other windows.
- The space is 3-D in nature is not always realized by the user.

3) Cascading windows

- special type of overlapping window.
- windows automatically arranged in regular progression
- each window has a different offset from others



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• Advantages.

- No window is completely hidden.
- Controlling and placing window is easier.
- Simplicity in visual representation.

o Disadvantage.

- No visual appeal as the windows create one behind another creating a glitch like appearance.
- Confusion while finding windows if the no of windows opened are greater in numbers.

B. Explain different phases of goal directed design.

- Goal directed design is a user-centered methodology.
- Developed by Alan Cooper.
 - It identifies behaviours & goals of the users.
 - It combines techniques, research, stakeholder interviews, design together.
 - Following diagram shows goal directed design.

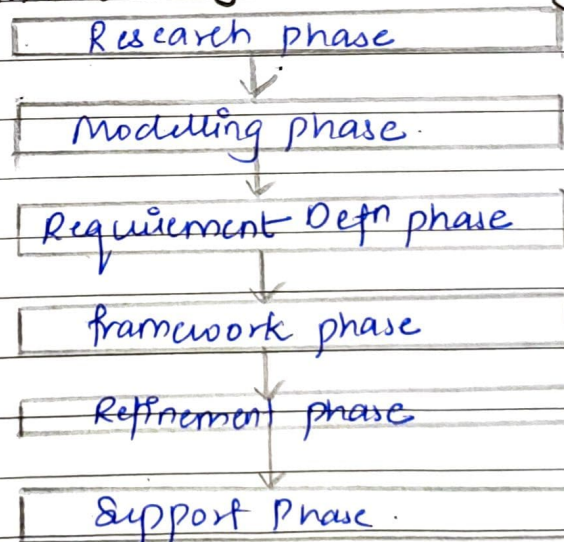


Fig:- Goal Directed Design process.)

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- 1) Research phase.
 - focuses on market survey's, conducting user interviews & observations.
 - This phase generates actual user information.
- 2) Modeling phase.
 - Output of research phase is converted to user model that includes information flow & workflow.
 - This phase helps to understand user details.
- 3) Requirement Defn phase
 - The phase is very important; here requirement collection is done.
 - It provides connectivity b/w users, models & product frameworks.
- 4) Framework phase
 - Actual product design & framework for the system behaviour.
 - product interaction framework is proposed in this phase.
- 5) Requirement Refinement phase
 - It mainly emphasizes on detail of system & product implementation.
 - It helps to create story board at a high phase.
- 6) Support phase.
 - This phase tries to meet all future ~~ex~~ requirements.
 - Application & design level support.
 - In this phase UAT is performed to make sure all goals are fulfilled.

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Q3. Solve any two out of three

- C. Draw and explain layers of mobile ecosystems.
- Mobile is an entirely unique ecosystem and it is made of different parts that come together & work with each other.
- It consists of various layers and each layer is reliant on the others to create a seamless & end to end user experience.
 - following are its layers:

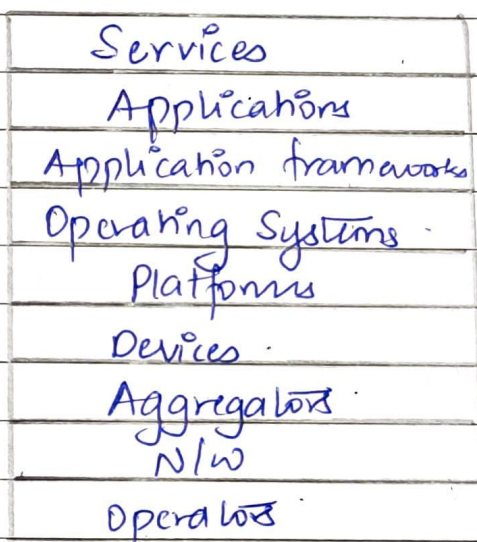
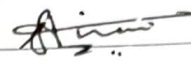


Figure: Layers of Mobile Ecosystem

i) Operators:

- Base layer in mobile Ecosystem.
- Also referred as mobile Networks operators (MNO).
- They act as guards as they donot allow any non reliable entities to enter the mobile n/w.
- They maintain a specific set of wireless services over a reliable cellular n/w.

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i) Networks

- Operates as a wireless n/w.
- It consists of a similar technology like radio that sends and receives signals from the antennas.
- The type of radio and antenna determines the capability & services you can access on it.

iii) Aggregators

- Also known as mobile enablers.
- They are third party companies that bridge the gap b/w content owners, carriers & operators & consumer.

iv) Devices:

- Devices are considered as handsets or terminals.
- These are outdated terms with emergence of wireless technologies.
- eg:- mobile phones.

v) Platforms:

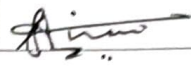
- These serve as a platform to run slw and various services.
- Their primary duty is to provide access to the devices.
- These are split into 3 categories: licensed, proprietary & open source.

(vi) Operating system:

- It controls/operates all apps residing on the phone.
- example: Android, iOS, Blackberry.

(vii) Application frameworks

- It runs on top of the OS, shares its services such as -

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messaging, authentication & many others.

- Application platforms are used to create apps such as games, browser, camera or media player.

(viii) Applications.

- They are computer programs that run on a website, a device or a cell phone.
- eg. Games, web browser or camera.

(ix) Services:

- These are everything the user is trying to do.
- These are functionalities provided by application, O.S.
- example: Internet, sending a message, clicking pictures.

A) Design a user interface for a 'save water' campaign. Assume appropriate data required for it.

→ Scenario 1: Add water saving info

1. Go to Homepage
2. Click on get started.
3. Add ~~do~~ info. 4. click add after adding info.
4. Go to dashboard.

Page No. (8 / 10)

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SAVE H₂O

INITIATIVE BY
MHSSCOE

Get started →

◀ 0 ▶

≡ Search 12

News

Dashboard Addt

Buy Support

Top recommendations


◀ 0 ▶


Tap

Tap

Auto

← Add your Information

 Date


 Amount: Ltr

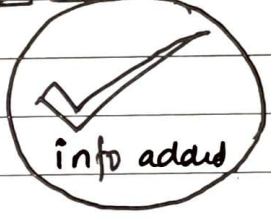
Add

We save water.

◀ 0 ▶

← Add your Information

 23-01-22

 info added

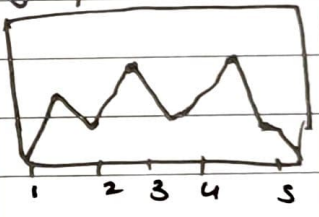
Add

We save water.

◀ 0 ▶

← Dashboard

Graph



1 2 3 4 5

Your History

23/10/12	3LTR
14/12/28	8LTR


✓

◀ 0 ▶

← Dashboard

Ⓐ

Top performers

1. Tejas ↑ 
2. Shriram ↓
3. Shrutai ↑

(more)

◀ 0 ▶

Swipe

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2) User scenario 2.

Change your name

1. Go to Home page
2. click on Hamburger menu box.
3. Click on profile
4. Edit button name.
5. Add name
6. Click save.

