

Q. Mobile ecosystem consists of different operators, networks & devices. How the knowledge of this will help in improving mobile based applications design.

Ans:

Mobile Ecosystem

- It is a collection of multiple devices, softwares, companies, etc. and the process by which data is shared by a user from one device to another device or by the device itself based on some programs.
- Data sharing can be done among devices of the same operating system or different operating systems.
- Data can be also shared between multiple devices with the same operating system. Eg. Apple Ecosystem.
- Mobile ecosystem layers
 - ① Operator
 - ② Network
 - ③ Devices
 - ④ Platforms
 - ⑤ Operating system.

① Operator

- The base layer in the mobile ecosystem.
- Operators can be referred to as mobile network operators (major).
- Operators are what essentially make the entire mobile ecosystem work.
- They are the gatekeepers to the kingdom.
- The operators role in the ecosystem is to create and maintain a specific set of wireless services over a reliable cellular network.

② Network

- Operators operate wireless networks.
- Remember that cellular technology is just a radio that receives a signal from antenna.
- The type of radio and antenna determines the capability of the network and the services you can enable on it.
- Majority of networks use GSM standard, using GPRS/4G LTE EDGE for 2G data and UMTS/HSDPA for 3G.

③ Devices

- Devices in mobile industry are considered as handsets/terminals.
- These are terms that are becoming outdated with the emergence of wireless devices that rely on operator networks, but do not make phone calls.
- Eg. Mobile phones.
- These components of a mobile ecosystem along with rest are reliant on each other and the knowledge of these is very essential for creating a seamless and end-to-end user experience.

Q. Mobiles are considered 7th mass media. How is it entering the remaining 6 mass media?

Ans:

- Mobiles are considered as the 7th mass media.
 - It is the first mass media that can do everything each of the six previous mass media can do.
 - Like the internet, the phone can replicate all the traditional mass media.
- ① First Mass Media
 - We can read printed content like newspapers. i.e. print.
 - ② Second mass Media
 - Download Music Recordings
 - ③ Third Mass Media
 - Watch movies
 - ④ Fourth mass media
 - Listen to Radio
 - ⑤ Fifth mass media
 - Watch Television
 - ⑥ Sixth mass media
 - Phone can copy all of the legacy PC-based internet.
- Not all of it is as convenient or comfortable but all of it is possible on mobile (advanced handset) today.
 - All of the existing media can be delivered via the mobile.
 - Mobile is inherently superior mass media as it adds all the elements of the previous six mass media.

Primary Window	Secondary Window
<ol style="list-style-type: none"> ① It is the first window which appears on the screen when activity/action starts. ② It represents an independent function or application. ③ It is used to present information that is continually updated. ④ Eg. Date & Time 	<ol style="list-style-type: none"> ① It is a supplementary windows ② It may be dependent upon a primary window or displayed independently of the primary window. ③ It is used for performing subordinate, supplementary actions ④ Eg. Tab options.

Menu Bar	Status Bar
<ol style="list-style-type: none"> ① It is used to organize & provide access to actions ② Located horizontally at the top of the window ③ It contains a list of topics or items that when selected are displayed on a pull down menu. 	<ol style="list-style-type: none"> ① It is the area where information of use of the user can be found. ② May be located at the top of screen in some platform or at the screen's bottom. ③ Information regarding the app for user is displayed here.

Overlapped windows

- It may be placed on top of one another like papers on a desk.
- They possess a 3D quality, appearing to lie on different planes.
- Size of the overlapping window can be altered.
- Location as well as plane of the windows is user controlled.

Cascading Windows

- It is a special type of overlapping window.
- It has the window automatically arranged in a regular progression.
- Each window is slightly offset from others.
- No window is ever completely hidden.
- Bringing any window to the front is easier.
- It provides simplicity in visual presentation and cleanliness.

Q. How will the usability improve using status information and warning messages, words, images and icons?

Ans:

① Status Message

- It is used to provide information relating to the progress of a lengthy operation.
- It provides the progress of a function using an indicator and short message describing the type of operation being performed.

② Information Message

- It provides information about the state of the system when it is not immediately obvious to use.
- It is used to provide feedback when normal feedback is delayed.

③ Warning Message

- It calls for an action for a particular situation or state of activity being processed.
- It also drives the user's immediate attention for an undesired situation.

④ Words

- minimal use of words should be done that calls the attention of the user.
- we should avoid usage of words in general & use them well.

⑤ Images

- standard images can be used but image internalization should be possible.
- Distinguishing navigational images from decorative images is required.
- We should minimize number of presented images & size of image & animation used in images.

⑥ Icons

- They are images used to reflect the idea about object icons.
- They are often used to represent objects and actions with which users can interact or manipulate.
- They may separate on a desktop or in a window or be clubbed together in a toolbox.

- All these different elements will improve the usability of the application for the user to have a rich experience