

ASSIGNMENT-I

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- i) Apply the special constraints and Requirement in Mobile OS vs Conventional OS.

ii) Memory Management:

Mobile operating system must manage memory much more aggressively than conventional OS due to the limited RAM available in

mobile device, mobile OS continuously optimize memory usage by killing background process and compressing memory power consumption is also critical in contrast conventional OS have access to large memory resources and use techniques.

(iii) ~~processor~~ Management scheduling:

In mobile OS processor management is focused on minimizing power consumption that use real-time scheduling to maintain a responsive user experience and often employ CPU throttling to extend battery

like conventional OS. However, prioritizing high performance and multitasking with schedulers designed for speed and efficiency rather than power saving.

(ii) Device management:

Device management in mobile OS is complex due to the need to handle a wide range of integrated sensors such as GPS, accelerometers.

(iv) Security:

Security is a top priority in mobile OS which use methods such as secure boot app and process stored personal system and biometric authentication like fingerprint and face recognition.

(v) Other functions:

Mobile OS are ~~designed~~ designed to be highly energy efficient provide seamless communication (calls, SMS, data) and optimizing user interface.

for touchscreens they are tightly integrated with app stores for easy application management.

2.) Justify the mobile Operating system function and features in Android OS, iPhone iOS and Windows OS

i) Ease of use -

Android offers high levels of customization and flexibility making it a favourite among users who like to personalize their device.

However, the flexibility can sometimes make Android seem complicated for beginners. iPhone iOS is renowned for its simplicity and intuitive design, making it a preferred choice for those who prefer ease of use.

ii) Good APP store -

Android Google play store has a massive selection of applications and is open to developers worldwide, creating a robust app ecosystem.

(i) Good battery life.

Android's battery life can vary widely between different manufacturers and models. Recent Android versions have introduced features like Doze mode and adaptive battery optimization improving performance. iOS devices however, are known for excellent battery life achieved via tight hardware, software integration and strict background activity control.

(ii) Data Usage and Organization.

Android provides strong data management features including data saver mode, detailed data usage tracker and data organization with its file app and seamless cloud integration, although it restricts user control to maintain system security.