

Mobile Computing

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2023-2024

Introduction

What is Mobile Computing

Mobile Computing System mean Wireless communication and its applications are generic technology that refers to numerous devices that are supportable to access transmitted data like voice, video, and text any time and any where over the wireless network infrastructure and in which to include mobile communication, mobile hardware, and mobile software and this react as human-computer interaction. Cause of these has improved the quality of our lives.



elements of mobile computing:

The major elements of mobile computing are mobile hardware, mobile software and mobile communication.

Mobile Hardware: The hardware is the mobile computing devices and supporting devices, with the capabilities required to perform their required operations and connect to networks.

Mobile Software: The most important software component is the operating system, which is the brain of any computing system. For a laptop, this may be Windows, Linux or macOS, and for a smartphone, it may be Android or iOS. The different applications running on a device are also part of the mobile software.

Mobile Communication: This refers to the communication infrastructure set in place, including wireless network infrastructure, protocols, data formats, bandwidths, and portals necessary to ensure seamless connectivity and communication.

Mobile Computing Devices

Usually, a mobile computing device would have a body- made of metal or plastic, a RAM, a CPU, a hard drive, a video card, an operating system, software applications, and finally, a network connection.

But mobile devices may have other components too, to make them portable, and certain characteristics that make them different:

Size: The portability of mobile devices demand a smaller size. Reduction in size without reducing capabilities have also always been a challenge when developing mobile devices.

Power Source: Mobile devices are usually powered by rechargeable batteries. Improving the battery life of mobile devices is another significant area of research.

Operating System: Laptops run on more or less the same OS as PCs, but for smartphones and other devices, the OS is significantly different. They are powerful but scaled-down and made specifically for particular devices.

Connectivity: Mobile computing devices have capabilities that allow access to the internet. Also, mobile devices like smartphones have access to mobile broadband networks that allow you to make and receive phone calls.

Applications: Applications meant for mobile devices are specifically designed for running on a particular OS. These applications are what extends the capabilities of devices beyond just connecting to the internet or making calls.

We live now in the age of the smartphone, but there are several other categories of mobile computing devices -

Laptop: Laptop computers are portable personal computers. It is meant to offer the same functionality as a PC, so the same OS, applications, and files can run on this.

Smartphone: A smartphone is a mobile phone with powerful capabilities. They typically have a touchscreen interface, have internet access, can run various applications, and include features like a camera and GPS.

Tablet computer: Tablets have touchscreens and virtual keyboards, and are often thought of as an intermediary between a laptop and a smartphone. They have better processing power, functionality, and screen resolution than smartphones. Some models may also have a stylus meant for navigating the touch screen better.

Wearable: A more recent addition, wearable computers like smartwatches offer limited features similar to a smartphone within a watch.