

# Desktop, Mainframe, and Mobile Computers

Computers come in many shapes, sizes, and with a variety of features. A *desktop computer* and its components are designed to fit on or under a desk:

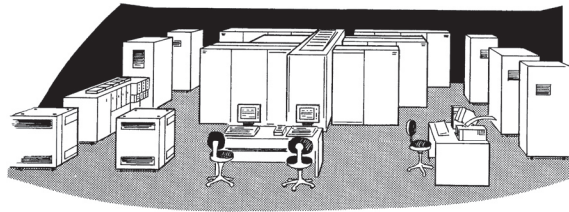


## PC and Mac

*PC* (personal computer) is often used to refer to a desktop computer that is Windows compatible and to differentiate from Mac (Apple) computers.

Desktop computers are single-user systems designed with microprocessor technology where an entire CPU (Central Processing Unit) is contained on a single computer chip.

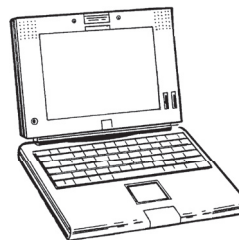
A *mainframe* is a large computer system that supports multi-user applications:



The mainframe typically occupies an entire room, and terminals connected to the mainframe are used to communicate with it. A terminal consists of a keyboard for data input, and a monitor for viewing output, and may be located on a different floor or in a building a few blocks away. Large companies and organizations use mainframes for tasks such as payrolls and reservations, which require the storage and processing of huge amounts of information.

*Mobile computing devices* contain long-lasting batteries that allow them to be portable. Mobile computing devices include:

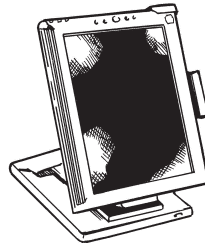
- *Notebook computers*, which are portable, lightweight computers with capabilities comparable to that of a typical desktop computer:



- *Tablet PCs*, which are designed similar to a pad of paper and a pencil. Users simply “write” on a screen with a device called a *stylus* that is shaped like a thin pencil. Handwriting recognition software is used to interpret a user’s handwriting. A keyboard can also be attached:

### ***Handheld Computers***

Handheld computers are widely used in occupations that require constant travel, such as parcel delivery, meter reading, and sales.



- *Handheld computers*, also called PDAs, are palm-sized and contain applications for storing contact information, schedules, lists, and games:



Handhelds come with a stylus for input and have a screen that is several inches vertically. Many types of application software have been written for handhelds, including spreadsheets and word processors. Some handhelds recognize handwriting, have a built-in keyboard, include a cellular phone, and provide Internet access.

- *Smartphones* are cellular phones that are able to send and receive e-mail messages and access the Internet:



Some smartphones have digital camera, video, MP3 player, and color display capabilities.

- *Wearable computers* are designed to worn. Typically they are incorporated into clothing or attached to the body using a device, such as a wristband. Wearable computers include MP3 players and hands-free cell phones. They also include wrist-top computers, which are worn as a traditional wrist watch and contain many of the features found in a hand-held PC, such as Internet access and videoconferencing capabilities. Wearable computers are used in many occupations. For example, auto mechanics can examine a car while wearing a head-mounted wearable computer which displays computer drawings of the car for comparison purposes. They are also used to monitor health problems, such as heart rate and respiration flow.