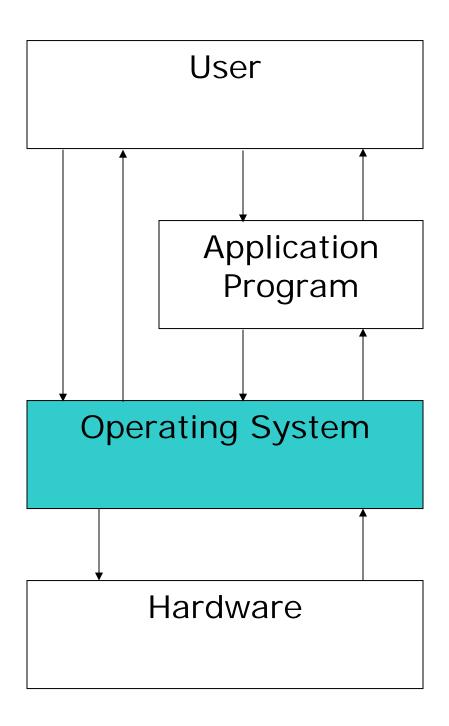
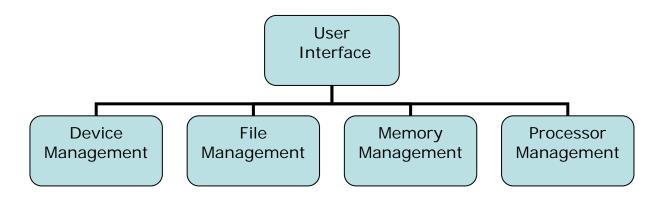
## CIST 1001 The Operating System

The Operating System is what makes the PC do the things you want it to do. The Operating System acts as an interface between the application program and the hardware.



## CIST 1001 The Operating System

An Operating System contains the following parts.



The **user interface** provides a means for the user or an application program to communicate with the operating system or request operating system services. It is unique to every operating system.

**Device management** allows a user/an application to control communication with the computers peripheral devices.

**File management** allows users/applications to create, delete, manipulate, or modify files.

**Memory management** manages the computers main memory, allocates memory space to applications as it is needed and ensures that applications do not conflict with each other.

**Processor management** manages the efficient use of processor time.

These managers are the foundation for all operating systems. Each of these managers works with each other. They perform the same function regardless of the operating system involved. All operating systems use these managers to perform all the tasks performed by a computer.

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## Types of operating systems

**Batch systems** run a process from start to finish with no interruption. In the old days input was from punch cards or tape.

**Interactive systems** are also known as time-sharing systems. The user could interact with the computer via a typewriter like terminal.

**Real-time systems** are designed to be responsive 100% of the time. An example would be an air traffic control system.

**Hybrid systems** are a combination of a batch system and an interactive system. They are accessed via terminals. Larger computer systems are hybrids

**Embedded systems** are computers located inside other products.

General-purpose systems are what we use in a computer.