

# System Software

Dannelly's CSCI 101 Lectures  
Week Three

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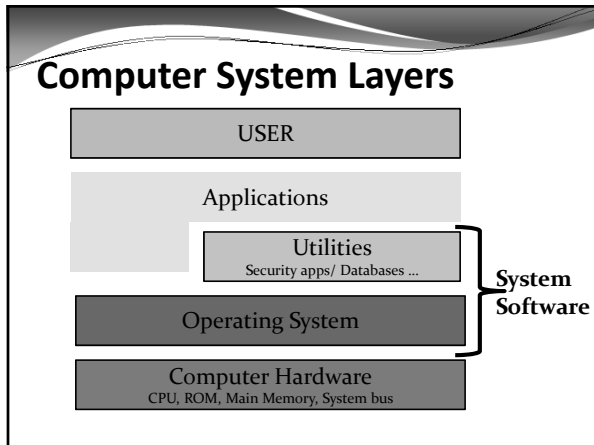
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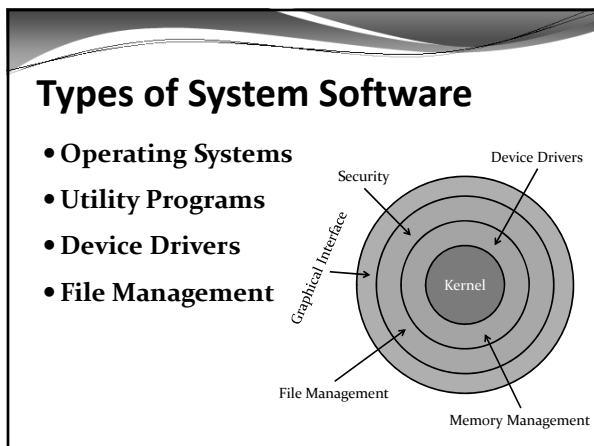
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**Types of Operating Systems**

- Single User, single task
- Single User, multitask
- Multiuser
- Real-Time

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**Linux**

**Pros**

**Cons**

- Not as many applications
- Higher learning curve

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**What the OS Does**

**Manages and Allocates computer resources**

- provides a user interface
- manages the CPU
- manages RAM
- manages disk storage
- talks to devices

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## CPU Management

- Scheduling Jobs
- Interrupt Control
- Multi-Tasking

Program A	Run	Wait	Run	Wait				
Program B	Wait	Run	Wait	Run	Wait			
Program C	Wait	Run	Wait	Run	Wait			
Combined	Run A	Run B	Run C	Wait	Run A	Run B	Run C	Wait

Time →

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## Memory Management

- Allocate Memory for running processes
- Virtual Memory
  - Swap Files
  - Thrashing

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## File Management

- The OS provides an organizational structure for the disk's contents
- File name extensions
- Deleting Files

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