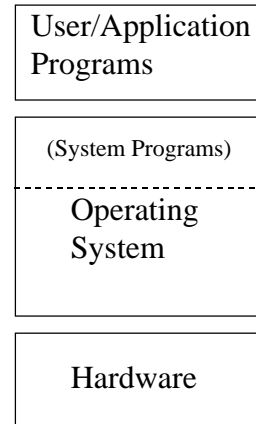


Operating System Services

- Program Execution
- Input/Output Operations
- File-System Manipulation
- Communications
- Error Detection
- Resource Allocation
- Accounting
- Protection

Accessing Operating System Services



Main categories of system programs:

- File Manipulation
- Status Information
- File Modification
- Programming Language Support
- Program Loading and Execution
- Communications
- The Command Interpreter

The Command Interpreter

- Interface between the user and the Operating System
 - Often referred to as the Shell
- Shells can be graphical or have a command line interface
 - Windows/Macintosh - graphical
 - UNIX/MS-DOS - command line

How Do System and User Programs Access the Operating System?

- System Calls
 - Used by programs to communicate with the Operating System and request services
- System calls exist to enable:
 - Process and Job Control
 - File Manipulation
 - Device Management
 - Information Maintenance
 - Communications