TOPIC 3: SYSTEM SOFTWARE

MOHD YUNUS SHARUM (DR.)
NORIDAYU MANSOR (DR.)

Faculty of Computer Science and Information Technology
Universiti Putra Malaysia
System Software

Explains about system software and its utilities
Overview

- Operating system (OS) is a set of programs that coordinates computer activities.
  - Various types of OS – Linux, Unix, MacOS, iOS, MS-Windows, Android, Chrome OS, etc.

- A utility program is a type of system software that allows a user to perform maintenance-type tasks.
Operating System (OS)

- **Start / Shutdown**
  Starting or shutting down computers

- **User Interface**
  Provides user interface in the form of graphical interface (GUI) or command prompt (text form)

- **Storage and Files Management**
  Provides a system and structure to manage files in storages

- **Network Connection**
  Help to establish network connection

- **Memory Management**
  Manage memory usage, including virtual memory management

- **Devices**
  Configure devices such as memory, display card, sound system etc.

- **Coordinate Task**
  Multiple tasks can be performed simultaneously

- **And many more …**

- **Operating System**
  A set of programs that coordinates computer activities
**Starting / Shutting down**

**Cold Boot**
Turning on a computer after it has been completely turned off

**Booting a computer**
A process of starting and restarting a computer

**Warm Boot**
Restarting a computer

**Temporary shut down**
Operating system allows computer to be temporarily shut down to reduce power consumption when computer is not used

**Sleep mode**
Saves documents, running programs or apps to memory, turns off all unneeded functions, and then places the computer in a low-power state

**Hibernate**
Saves any open documents and running programs or apps to an internal hard drive before removing power
**OS Utilities Program**

**Utility Program**
allows a user to perform maintenance-type tasks

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**File Manager**
is a tool that performs functions related to file management

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**Search tool**
attempts to locate a file on your computer or mobile device based on criteria you specify

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**Disk Cleanup**
searches for and removes unnecessary files

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**Disk Defragmenter**
reorganizes the files and unused space on a computer’s hard disk so that the operating system accesses data more quickly and programs run faster

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**Backup / Restore tool**
A backup tool allows users to copy, or back up, selected files or the contents of an entire storage medium to another storage location.

A restore utility reverses the process and returns backed up files to their original form.