

# Operating System Review Android

## Introduction

### *Chapter Objectives*

Review the knowledge of operating system and introduce the basic concept of android

### *Operating System*

#### 1. Description

- Software between Hardware System and Application Software that controls hardware and manages software
- Resources management
- Protect hardware and facilitate software developers.

#### 2. Example

- OS organizes data on the disk
- Kernel module is a small part to communicate with CPU, RAM and I/O

### *Android*

#### 1. Description

- Operating System for Mobile , not a device
- Linux Distribution and Java
- Requirement: OOP, Java, Networking, Data representation

#### 2. Details and Examples

- Package: set of classes
- Inheritance: parent and children
- Method overriding
- Polymorphism: allow children to modify, to do more things than parent
- Interface: a class implement an interface
- Casting: cast a type to another type
- Exception: handling error
- Asynchronous programming: do not have to wait (response from server for example)
- Separation of UI and functionality (functions not depend on UI) e.g: HTML/CSS (view) for presentation, UI design; JavaScript/PHP (controller) for functionality.
- Client-server model: client sends request to server and server performs back to client