

Lecture Notes

Operating System Review & Android Introduction

1. Chapter Objectives

Go through the basic knowledge of operating system and get to know the basic concepts of Android.

2. Operating System

- Definition
 - A software that controls hardware and manages software.
 - Intermediate layer between software and hardware.
- Examples
 - Kernel determines which programs get access to which hardware resources.
 - The operating system provides an interface between an application program and the computer hardware.

3. Android

- Definition
 - A Mobile Operating System.
 - Developed by Google.
 - Based on the Linux kernel.
 - Applications are written using Java.
 - Developed for multiple devices: phones, tablets, TVs, etc.
- Why android?
 - User-friendly.
 - Cheap.
 - Popular.
 - Efficient.
- What is needed?
 - OOP: package, inheritance, method overriding, aggregation, interface, etc.
 - Java: handling exceptions, casting.
 - Networking: client-server model, HTTP, API.

- Data representation: XML, JSON.