

Mobile Application Development

Chapter-1: Introduction to Mobile Computing

- 1.1 Introduction to Mobile Computing
- 1.2 Characteristics of Mobile Applications Development
- 1.3 Benefits of Mobile Application Development
- 1.4 Mobile Application Architecture
- 1.5 Design Considerations of Mobile Application
- 1.6 2.5G – GPRS (General Packet Radio Service)
- 1.7 CDMA
- 1.8 EDGE: Enhanced Data Rates for GSM Evolution
- 1.9 3G Concepts
- 1.10 WiMAX (Worldwide Interoperability for Microwave Access)
- 1.11 Hardware Architecture: Smart Cards
- 1.12 SIM (Subscriber Identity Module)

Chapter-2: Android Programming Introduction

- 2.1 Introduction: Android Programming
- 2.2 History of Android
- 2.3 Android Architecture (Software Stack)
- 2.4 Android Development Tools
- 2.5 Overview of Object-Oriented Programming (OOP) in Java
- 2.6 Method Overloading and Overriding in Java
- 2.7 Java Virtual Machine

Chapter-3: Development Tools

- 3.1 Android Development Tools
- 3.2 Installing and Using Eclipse with ADT Plugin
- 3.3 Installing Virtual Machine for Android Jelly Bean (Emulator)
- 3.4 Configuring the Installed Tools
- 3.5 Creating an Android Project
- 3.6 User Interface Architecture

Chapter-4: User Interface Design

- 4.1 Introduction and Types of Layout

- 4.2 Android Widgets
- 4.3 Android Toast
- 4.4 Android Toggle Button
- 4.5 Android Spinner
- 4.6 Android Option Menu
- 4.7 Android Context Menu
- 4.8 Android Intent
- 4.9 Adapter
- 4.10 Notifications
- 4.11 Android - Styles and Themes

Chapter-5: Database

- 5.1 Understanding of SQLite Database and Connecting with the Database
- 5.2 Threads in Android
- 5.3 Android Google Maps
- 5.4 Android Sensors