

EINTVAC02- Mobile Applications and Services

Unit 1 Introduction

Introduction to mobile devices and mobile platforms, Development environments, Mobile OS architectures of android, iOS and Windows, Setting up the mobile app development environment along with an emulator

Unit 2 Mobile App development using android

Mobile App development using android: interface design – Layout, UI elements, Draw-able, Menu, Activity- states and life cycle, Interaction among activity, Services- states and life cycle, Notifications, Broadcast receivers, Telephony, SMS APIs, Native data handling- on device file I/O, Shared preferences

Unit 3 Database Connectivity

Working with mobile database (SQLite), Interacting with database via internet/intranet., Graphics and animations- custom views, Canvas, Animation APIs, location awareness, Multimedia- audio/video playback and record, Native hardware access.

Unit 4 Testing

Testing Mobile Application, Debugging mobile application, White box testing, Black box testing, Test automation of mobile apps using JUnit for android, Robotium, MonkeyTalk.

Unit 5 Market Distribution

Versioning mobile apps, Signing mobile apps, Packaging mobile apps, Distributing apps on market place. Designing an App using various services provided by android.

Text Books:

Anubhav Pradhan, Anil V. Deshpande, Composing Mobile Apps: Learn – Explore – Apply using Android, Wiley India.

Wei-Meng Lee, Beginning Android 4 Application Development, Wiley India.

Carmen Delessio, Shane Conder, LaurenDarcey, Android application Development in 24 Hours: SAMS Teach Yourself, Pearson Education, 3rd Edition.

References:

Charlie Collins, Michael Galpin, Matthias Kappler, Android in Practice, Dreamtech Press, 2012.

Michael Burton, DonnFelker, Android Application Development for Dummies, Wiley India, 2nd Edition.

Pradeep Kothari, Android Application Development (with KITKAT support), Black Book, Dreamtech Press.