

APPLICATION DEVELOPMENT TOOLS (Professional Elective-I)

Course Code : 15IT1101

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Course Outcomes:

At the end of the course, a student will be able to

- CO 1** Deploy Android applications on a Handset.
- CO 2** Use Widgets in Android applications.
- CO 3** Develop effective GUI on android platform
- CO 4** Create multimedia applications on android platform.
- CO 5** Debug android applications.

UNIT-I

(10 Lectures)

INTRODUCTION TO ANDROID

Installing the Android SDK, Creating Android Virtual Devices, Creating the First Android Project, Using the TextView Control, Using the Android Emulator, The Android Debug Bridge (ADB), Launching Android Applications on a Handset

UNIT-II

(10 Lectures)

BASIC WIDGETS

Understanding the Role of Android Application Components , Understanding the Utility of Android API ,Overview of the Android Project Files ,Understanding Activities ,Role of the Android Manifest File, Creating the User Interface, Commonly Used Layouts and Controls, Event Handling, Displaying Messages Through Toast, Creating and Starting an Activity, Using the Edit Text Control, Choosing Options with Check Box, Choosing Mutually Exclusive Items Using RadioButtons

UNIT-III**(10 Lectures)****LAYING OUT CONTROLS IN CONTAINERS**

Introduction to Layouts, Linear Layout, Relative Layout, Absolute Layout, Using Image View, Frame Layout, Table Layout, Grid Layout , Adapting to Screen Orientation

UNIT-IV**(10 Lectures)****UTILIZING RESOURCES AND MEDIA**

Resources, Creating Values Resources, Using Drawable Resources, Switching States with Toggle Buttons , Creating an Image Switcher Application , Scrolling Through ScrollView, Playing Audio, Playing Video, Displaying Progress with ProgressBar, Using Assets

UNIT-V**(10 Lectures)****USING SELECTION WIDGETS AND DEBUGGING**

Using List View, Using the Spinner Control, Using the Grid View Control, Creating an Image Gallery Using the View Pager Control, Using the Debugging Tool: Dalvik Debug Monitor Service (DDMS), Debugging Applications, Using the Debug Perspective, Dialogs, Fragments.

TEXT BOOKS:

1. B.M. Harwani, Android™ Programming Unleashed, 1st Edition, Pearson Education,2013

REFERENCES:

1. Prasanna Kumar Dixit, “Android (English”, 1st Edition , Vikas Publishing House, 2014
2. W. Frank Ableson, Robi Sen, Chris King, C. Enrique Ortiz, “Andrioid in Action”, 3rd Edition, Manning Publications Co, 2012.