

Text Books:

1. Lauren Darcey and Shane Conder, "Android Wireless Application Development", Pearson Education, 2nd ed. (2011)

Reference Books:

1. Reto Meier, "Professional Android 2 Application Development", Wiley India Pvt Ltd
2. Mark L Murphy, "Beginning Android", Wiley India Pvt Ltd
3. Android Application Development All in one for Dummies by Barry Burd, Edition: I

Branch: B.Sc.(IT)	Semester-V
Subject Code: 5201	Lecture: 04 Credit: 04
Course Opted	Core Course – 15 (Practical)
Subject Title	MOBILE APPLICATION DEVELOPMENT -LAB

Course Objectives:

- To facilitate students to understand android SDK
- To help students to gain a basic understanding of Android application development
- To inculcate working knowledge of Android Studio development tool

Course Outcomes:

At the end of this course, students will be able to:

- Identify various concepts of mobile programming that make it unique from programming for other platforms,
- Critique mobile applications on their design pros and cons,
- Utilize rapid prototyping techniques to design and develop sophisticated mobile interfaces,
- Program mobile applications for the Android operating system that use basic and advanced phone features, and
- Deploy applications to the Android marketplace for distribution.

Modules	Sr. No.	Topic and Details	No of Lectures Assigned	Marks Weightage %
UNIT-I	1	Introduction: Installing Java, and ADT bundle – Eclipse Integrated Development Environment (IDE), Creating Android Virtual Devices (AVDs)	2	4
	2	Android Architecture Overview and Creating an Example Android Application: Creating a New Android Project, Defining the Project Name and SDK Settings, Project Configuration Settings, Configuring the Launcher Icon, Creating an Activity, Running the Application in the AVD, Stopping a Running Application, Modifying the Example Application, Reviewing the Layout and Resource Files	2	4
	3	Android Software Development Platform: Creating Your First Android Application Developing a billing app in android.	2	4

UNIT-II	4	Understanding Android Views , View Design an application representing a simple calculator.	2	4
	5	Graphical User Interface Develop an application for working with Menus and Screen Navigation.	2	4
	6	Displaying Pictures: Add a drawable object an Image in the res/drawable folder	2	4
UNIT-III	7	Files, Content Providers, and Databases: Design a simple to-do list application using SQLite Develop an application demonstrating Internal Storage to store private data on the device memory. Develop an application for working with Notifications.	4	8
	8	Intents and Intent Filters: Intent Overview, Implicit Intents, Creating the Implicit Intent Example Project, Explicit Intents, Creating the Explicit Intent Example Application, Intents with Activities, Intents with Broadcast Receivers	3	6
UNIT-IV	9	A Basic Overview of Android Threads and Thread handlers: Using Worker thread write Android code for a click listener that downloads an image from a separate thread and displays it in an ImageView.	2	4
	10	Messaging and Location-Based Services: Develop an application for working with location based services. Develop an application for creating a proximity sensor.	2	4
	11	Multimedia: Audio, Video, Camera: Develop an application for working with device camera. Develop an application for working with graphics and animation.	2	4
TOTAL			25	50

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