

CSE225:DEVELOPING ANDROID APPS

L:2 T:0 P:2 Credits:3

Course Outcomes: Through this course students should be able to

- CO1 :: construct apps by leveraging UI components in android environment
- CO2 :: investigate the background operation and inter component communication in apps
- CO3 :: repeat and contrast the utilization of fragments and activities for app
- CO4 :: examine a user interfaces by incorporating both standard views and custom views
- CO5 :: categorize secure storage of data in Android applications
- CO6 :: illustrate effective navigation within a single activity

Unit I

Views & Component : Scroll View, Toolbar, Rating Bar, Splash Screen, Progress Bar, Footer, Custom Toast

Unit II

Managing Application Communication and Scheduling : Intents, Pending Intents, Comparing Intents and Pending Intents, Alarm Manager, Job Scheduler, Notification, Implementing notification channels

Unit III

Fragments & Pickers : Fragments- Static and Dynamic Addition, Data Transfer/Communication between Fragments, Date Picker Dialog, Time Picker Dialog

Unit IV

Advanced UI Elements with Custom Views : Overview of existing Android Views, Scenarios of custom views, extending Android Views, Adding custom properties, Styling and customizing extended views

Unit V

Data Storage Techniques : Shared Preferences for key-value storage, Internal Storage for private app data, Reading and writing files in Internal Storage, Managing file paths, External Storage for shared data, Accessing runtime permissions

Unit VI

Implementing Effective Navigation : Creating Swipe Views with Tabs, Creating Navigation Drawer, View Pager

List of Practicals / Experiments:

List of Practical

- Build an app to implement UI Components and Basic Views
- Build an app to implement intents & background scheduling
- Build an app to use fragments and data transfer
- Build an app for custom views and advanced UI elements
- Build an app to explore data storage techniques
- Build an app to implement effective navigation

Text Books:

1. ANDROID APPLICATION DEVELOPMENT ALL-IN-ONE FOR DUMMIES by BARRY BURD, JOHN PAUL MUELLER, WILEY

References:

1. ANDROID APPLICATION DEVELOPMENT by BARRY BURD, WILEY
2. ANDROID APPLICATION DEVELOPMENT by PRADEEP KOTHARI, DREAMTECH PRESS

