

## CSE224:FUNDAMENTALS OF ANDROID

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

**Course Outcomes:** Through this course students should be able to

CO1 :: recall various components of Android system architecture used in android based projects

CO2 :: illustrate the different layouts used in android applications using Kotlin

CO3 :: classify the device architecture and build the permissions model required to maintain privacy

CO4 :: evaluate android mobile apps running on emulators and physical devices

CO5 :: summarize the prepared activities into single app

CO6 :: apply different menus based on application theme and user interface

### Unit I

**Introduction to Android and Kotlin** : Introduction to Kotlin, Variable, Data type, Operator, Control Flow, Function, Array, String, OOPs Concept, The Activity and its Life Cycle

### Unit II

**User Interfaces** : Layout: Linear, Relative, Grid and Constraint

### Unit III

**Localize your app** : App localization, Log, Snackbar

### Unit IV

**Intents and Toast** : Intent Class, Implicit and explicit Intent, Toast event implementation, ActionBar

### Unit V

**Permissions and App chooser** : Request App Permissions, Handle the permissions request response, App chooser

### Unit VI

**Menus and Dialogs** : Option Menu, Context Menu, Popup Menu, Alert Dialog, Custom Alert Dialog

### List of Practicals / Experiments:

#### Basic of Kotlin

- Create an application which will contain the basic concepts of Kotlin.

#### Layouts

- Create an application which will contain different types of layouts like linear, relative etc.

#### SnackBar

- Create an application based on snackbar

#### Intents

- Create an application based on implicit intent and explicit intent.

#### Toast

- Create an application which will display toast in the application.

#### Menus

- Create an application which will contain different types of Menus like option, context etc.

#### Dialogs

- Create an application to implement different types of dialogs.

### Text Books:

1. BEGINNING ANDROID PROGRAMMING WITH ANDROID STUDIO by J. F. DIMARZIO, WILEY

### References:

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

