



ANDROID COURSE CONTENT

There is an Old Chinese proverb “I hear I forget, I see I remember, I do I understand”. And we can’t agree more. Even though most of the topics would have some examples to demonstrate the usage, challenges of creating a full-blown Android application are very different in nature. E.g., what Android platform you want to support in your application, how to show relevant error to the users, supporting different android version, multi-language support etc...

That is why you will be doing an Android project under our guidance where you will know about the real-time challenges of an Android Application.

Pre-requisites

- Basic knowledge of Java (If you do not know Java, we have a different but related course called Android with Java Basics).
- Mac or PC with at-least 4 GB Ram.
- Above all willingness to learn.

Installation

- Installation for Windows or Mac.

- Converting DIP to Pixels.
- Overview of Layouts.
- Understanding Grid Layouts

Android Basics

- Creating and running Hello World project.
- Android Application Overview.
- What are the several files created in a project.
- Finding your way through XML files
- How to create Android Virtual Device.

Event Handling

- Overview
- Using Event Listeners
- Multiple Event Listeners.

Gestures

- Overview of Gestures
- Example involving Gestures

Fragments

- Overview
- Designing top fragment
- Fragment class.

Intents

- Overview of Intents.
- Sent Intent Data.
- Sending Broadcast Intents.
- Receiving Broadcast Intents.

Activities and State

- Understanding Activity States.
- How states are changed.
- Understanding Lifecycle.

Widgets, Pixels & Layout

- Overview of Widgets.
- Adding properties to Widgets.
- Adding multiple Widgets.



Threads

- Overview
- Thread Handlers.
- Example of Threads

Services

- Overview of Services
- Bound Services
- Example of Services

Input Controls

- Text Box
- Check Box
- Radio Button
- Buttons
- Alert Dialog
- Seekbar
- Toggle Buttons

ListView and Adapters

- Overview
- Examples
- Custom ListView Rows
- Custom ListView Adapter

Menu, Toolbar

- Menus and Toolbar in Android
- Toast

UI Layouts

- Linear Layout
- Relative Layout
- ScrollViews
- Table Layout

Sensors and Accelerometer

- Overview of Sensors
- Different types of Sensors
- Working with Accelerometer
- Examples

Working with Database

- Introduction of Database
- What is SQLite Database
- How to create New Database
- CRUD (Create Read Update Delete) operations
- Example of Database Application

Styles

- Introduction
- Use Cases
- How to Apply Styles

Notifications

- Introduction
- Adding Notifications to App
- Adding custom Notifications
- Examples of Notification.

Preferences

- What are shared preferences
- Examples of shared preferences

Debugging

- How to Debug and Test
- Running Application without emulator
- Loading and running apps on the Mobile.

Camera and Multimedia

- Working with Images
- Working with Videos
- Working with Camera
- Learning with Example

Using Maps

- Overview of Maps
- Learning with Example



- Getting Location
- Learning with Example

Multilanguage Support

- Strings.xml
- Languages and Locale
- Dos and Don'ts
- Creating multi-language Demo Application.
- Learning with Example

Interview Questions

If you are hunting for Job, we will prepare you for Interviews also

Android Resources

Free android e-books, resources etc.

Android Project.

Publishing your Application

- Creating Developer Account
- Create Icons
- Application Metadata
- Packaging your application
- Application Metadata - Title, Description and Publish
- Versioning your Application.

