

# Advanced Android Programming

## Course 51052 – 24 Hours

### Overview

This course is aimed at experienced Android developers that would like to enhance their knowledge and learn advanced Android programming concepts.

The course includes many topics such as UI, multimedia, Firebase server-side coding and more. Furthermore, we will learn the concept and syntax of the Kotlin programming language and how it can help minimize coding in Android applications.

### Who Should Attend

The course is designed for experienced Android developers with good understanding of Java language.

### Course Contents

#### Android UI

- Fragments
  - Support multiple screens
  - Tabs
  - Drawer
- Home screen widgets

#### Android Libraries

- Google Jetpack
  - Lifecycles
  - Room
  - LiveData
- Google Mobile Vision

#### Multimedia

- MediaPlayer
- SoundPool

#### Google Firebase

- Authentication
- Storage
- Realtime DB
- Cloud Messaging

### **Better Performance with Threading**

- Threads and UI
- AsyncTask
- HandlerThread
- ThreadPool
- JobScheduler

### **Kotlin 101**

- Kotlin basics
- Vars vs. vals
- Classes and functions
- Extension functions
- Android extensions