

## ANDROID USING KOTLIN PROGRAMMING LANGUAGE BASIC

The Android - Basic Level course is designed to teach participants how to create simple Android applications, in addition to introducing them to the basics of programming and the basics of the Kotlin programming language, and since Kotlin is an Object Oriented Programming Language (OOP), it allows participants to solve complex problems using objects. This course also aims to familiarize participants with how to announce a permission request in the event that the application needs to use resources or information outside its protection scope, in addition to involving them in resource control practices for language and culture based on the system language setting, where they can provide support for various local settings using the guide Resources in their Android project, and rate this app upon completion..

### What you will learn:

- Being familiar with the mobile application development architecture.
- Building stand-alone mobile applications which include many features like multimedia, themes, view group and fragmentation.
- Getting the techniques, skills and abilities to build Android applications with different storage techniques like Shared Preferences and SQLite database.
- Supporting different screen sizes, different languages and versions for your mobile app.

### Main Topics:

**Android Using Kotlin Programming Language - Basic** training course includes the following topics:

- Module 1: Basics of Kotlin
- Module 2: OOP using Kotlin
- Module 3: Database
- Module 4: Android Overview
- Module 5: Creating and Running Android Apps
- Module 6: Android Views
- Module 7: Layout
- Module 8: Menu and Media
- Module 9: Shared Preferences
- Module 10: SQLite Database
- Module 11: Fragment
- Module 12: SMS and Broadcast Receiver
- Module 13: Contacts
- Module 14: Permissions
- Module 15: Multi Version and Multi Language Support
- Final Evaluation

## ANDROID USING KOTLIN PROGRAMMING LANGUAGE INTERMEDIATE

Android Intermediate Level Course takes the trainee to an advanced level which includes step by step instructions, classroom exercises and discussions for building dynamic applications that use background services and broadcast receivers, sending and receiving SMS, connecting to server side database using different techniques of web services and building GCM applications and push notifications. In order to ensure trainees will achieve these targeted objectives, they are required to prepare a final project which includes server side database, web services and user notifications.

### What you will learn:

- Building applications that are connected to remote servers using Web Services.
- Notifying users using SMS and GCM.
- Using different types of services which help to improve the background process.

### Main Topics:

**Android Using Kotlin Programming Language - Intermediate** training course includes the following topics:

- Module 1: Introduction to Web API and JSON
- Module 2: Gradle and Libraries
- Module 3: Consuming Web API
- Module 4: Location Based System
- Module 5: Google Map
- Module 6: Material Design
- Module 7: Animation

## ANDROID USING KOTLIN PROGRAMMING LANGUAGE ADVANCED

Android Advanced Level Course includes step by step instructions, classroom exercises and discussions for implementing advanced and latest android technology in the field of location services, material design, Firebase authentication, real time database, Google Ads and lastly how to upload application to Google Play store. In order to ensure trainees will achieve these targeted objectives, they are required to prepare a final project which includes GPS, Material Design, and Sensors... etc.

### **What you will learn:**

- Building location based applications with GPS and Google Maps.
- Creating attractive UI with material design and animations.
- Supporting your applications with sensors, social media, and widgets.

### **Main Topics:**

**Android Using Kotlin Programming Language - Advanced** training course includes the following topics:

- Module 1: Introduction to Firebase
- Module 2: Authentication
- Module 3: Real Time Database and Fire Store
- Module 4: Storage
- Module 5: Google Ad Mob
- Module 6: Publish your App

### **Training outcomes**

Upon successful completion of this track, learners are expected to achieve the following learning outcomes:

- Understand the JAVA programming concepts
- Understand Android programming and design concepts
- Develop and design fully functional mobile application using Android operating system.
- Learner will be exposed to technology and business trends impacting mobile applications
- Learner will be competent with the characterization and architecture of mobile applications.
- Learner will be competent with understanding enterprise scale requirements of mobile applications.

## **Implementation Strategy:**

### **A. Methodology:**

Due to the health precautions and to ensure the safety of the trainees and the employees, after consideration of the precautionary measures taken by the government of the Jordan to avoid the spread of the corona virus, Pioneers Academy is looking forward to developing human capital in the government sector and help agencies meet their training needs such as to raise the efficiency of internal cadres and achieve annual training indicators, we offer you an innovative and alternative implementation of training programs through the Online Training System with the LIVE Broadcast feature, where employees can join the training courses VIRTUALLY, meaning to say, without physical presence at all, whether at home (online jobs) or at workstations. What's most important is that participant must have any devices such as computer, or a mobile phone, or a tablet to be connected to the internet so he can log-in using the provided account by Pioneers and join in the session. By doing so, they can live the atmosphere of the training courses and interact easily with the trainer and co-trainees virtually.

In order to apply the said Online Training System alternatively, pls. be guided of the following items:

1. Pioneers Academy will prepare and book our smart platform and will provide the 2nd Party (Client's Training Department) all unique user names & passwords for each participant and send them back to the 2nd party days prior to the training, so they will have ample time to distribute these accounts to each of the confirmed participants.
2. On the date of the scheduled training course, each participant should log-in to our website ([www.Pioneersacademy.com](http://www.Pioneersacademy.com)) by entering his account user name & password.
3. The interaction within the training course (between the trainer and the trainees) takes place through 3 available methods (video – Audio only - writing).
4. The participant can find the training material, exercises, Pre-Post Assessment, case studies, and others via his account page.
5. The participant can interact with each other as well through the mentioned 3 methods. (Video – Audio only - writing)
6. Upon completion of the course, the participant shall evaluate the training course through his account.



7. The participant is required to take the Assessment Tests, before and after completing a specific training course.

8. Your Training Department (Supervisors or Coordinators) may enter (join) the smart platform and follow up during the session at any time, to ensure the quality of the training.

9. Once the training is completed, the participants can return to the recorded video later (during a pre-agreed period such as within 3 months or in 6 months).

10. Showing off the participant's live photo or hearing his voice during the training is optional. He may or may not allow it.

11-(Optional) Participants coming from other entities or agencies, with complete requirements prior to the scheduled training, are also welcome to attend or join with other groups, provided with one condition, if attending entities agreed to join together in 1 scheduled session.

12- Technical support will be provided by the 1st Party throughout the session to ensure that immediate assistance is provided when the need arises.