Google Android Development

Android App Development Workshop Zero to hero mainly focuses on how to use native Android OS for building your own Android Application. Only the basic knowledge of programming is sufficient for Android App Development. The workshop will start from the basics like designing layouts and building complex layouts. The main focus would be introducing students to android development environment and firebase platform with tools and infrastructure designed to help developers build high-quality apps.

Firebase is made up of complementary features that developers can mix-and-match to fit their needs.

Content Outline:

BASIC Session:
Learn to build Single screen app with Maps and Firebase

Overview
This Codelab will provide a guided, hands-on coding experience. Most codelab will step you through the process of building a small application, or adding a new feature to an existing application source code.

What you'll learn
● What is API Levels?
● Understanding Android Studio
● Basic programming languages intro: Java and XML
● Designing Front-end through XML
● Designing Backend through JAVA
● Practicing various design Layouts
● Working with various Widgets: Text-View, Edit-Text, Buttons, Image-Views, and ScrollView.
● What are Activity and its Life-Cycle?
● Designing an Activity
● Registering the Activity in Manifest File
● Setting up the Android Virtual Devices
● What are Intents
● Starting another Activity using both types of Intents
● Sending Data from one Activity to another

Codelab: Make your App Material
Material design is a comprehensive guide for visual, motion, and interaction design across platforms and devices. In this codelab, you'll learn the principles of this design language by building a sample Android app.

Overview

This Codelab will provide a guided, hands-on coding experience. Most codelab will step you through the process of building a small application, or adding a new feature to an existing application source code.

What you'll learn
- How to use the Android Design Support Library.
- How to use the Vector Drawables.
- How to apply material design to your Android app.
- The following key material design components and principles:
- Themes and colors to create tangible surfaces and print-like design
- App layout best practices for improved navigability
- Animation and touch feedback to express meaningful motion.

What you'll need
- Android Studio version 2.1+ and JDK 8+
- A test device with Android 4.1+
- A USB micro to USB cable.

* Android devices running Android 2.3.3 (Gingerbread, API Level 10) or higher may be used, however, some material design effects, such as the ripple effect, will not be visible on devices running on Android 4.4 (KitKat) or before.

SESSION 3: Zero to Hero session

Overview

This talk will cover common doubts and faq every solo developer student has.It will include a walkthrough of publishing your app on play store to earning from mobile ads serving targeted audience worldwide through quality apps

What you'll learn
- App publishing on google play store
- Make money while you learn
- General FAQ's for student developers
- Publishing on Google Play through the Developer Console
- Display ads with AdMob.
- Increase installs with improved store listings
- Pricing and distribution

Benefits to Participants:

1. Software toolkit to each participant.
2. Training Material (eBooks) for each participant.

The Faculty:

The faculties are people from top academic institutions, industries and research institutions. They have experience in the industries at the same time had the best education in this field. In fact some of them are pursuing master and Doctorate at Top notch universities to build their knowledge base.

Note: Techfest, IIT Bombay Certificates to all participants (only if participant attends all the sessions).