Android and IOS Application Development Training with Flutter

Duration: 5 Days

Description

Flutter is a free and open source mobile UI framework created by Google that you can use to develop mobile, web and desktop applications. By using Flutter, developers can save the cost and time of developing applications that target both platforms and delivering cross-platform mobile applications. Interface designers, on the other hand, can use Flutter to develop more successful application designs that adapt to the Android and iOS world.

What Will You Learn?

- You will be able to program having comprehensive knowledge of of Dart language.
- You will have comprehensive knowledge of the details of the Android and IOS programming world.
- You will be able to develop applications in a fully professional way.
- You will be able to turn all your ideas into mobile applications.
- You will be able to deliver your application to many people through platforms such as Google Play and App Store.

Outline

DART Section

Section 1: Introduction to Darts

- Darts Login
- Installation and First Project Creation
- Introducing the Work Environment and Running the First Program
- Opening a Project in Android Studio

Section 2: Variables and Data Types

- Creating Variables
- Constant - Constants
- Type Conversion

Section 3: Standard Programming Structures

- If Structure
- Switch Working Structure
- For and While
- Break - Continue
- String

Section 4: Object Oriented Programming

- Login
- Functions
- Constructor
- Packages and Import
- Visibility Modifier
- Static Variable and Methods
- Enumaration
- Composition
- Inheritance Introduction
- Inheritance Constructor Relationship
- Inheritance (Override)
- Inheritance (Polymorphism)
- Objects Type Conversion
- Example (Polymorphism - Type Conversion - Type Check)
- Using Interface

Section 5: Collections

- List Operations
- HashSet Operation
- Working HashMap

Section 6: Advanced Darts

- Try Catch
- Isolate
- Asynchronous Transactions

FLUTTER Section

Section 1: Introduction to Flutter

- Flutter Login
- Project Creation
- Emulator and Simulator Setup
- Running Android Studio Project on Emulator

Section 2: Flutter Design

- Design Introduction
- Row - Column - Stack
- MainAxisAlignment
- CrossAxisAligment
- MainAxisSize
- Center
- Align
- SizedBox
- Spacer
- Padding
- Expanded
- Customized Widget
- Multiple Display Support
- Application - Recipe
- Creating a Logo or Icon for the Application

Section 3: Flutter Working Structure

- Application Structure
- State Structure
- Creating an Application Page
- Switching Between Pages
- Using Return Keys
- Cross-Page Data Transfer
- Back Stack
- Lifecycle
- Coding Techniques in Widgets
- FutureBuilder
- Creating the Application APK
- Uploading the Application to Google Play

Section 4: Flutter Widgets

- Button - Text - Textfield
- Floating Action Button
- Switch
- Toggle Buttons
- CheckBox
- RadioButton

- ProgressBar - Slider
- Image
- SrollView
- TimePicker - DatePicker
- DropDown Button
- GestureDetector

Section 5: User Interaction

- Creating a SnackBar
- Adding SnackBar Action
- SnackBar Customization
- Creating AlertView
- AlertView Customization

Section 6: Material Design

- Forms
- Using AppBar
- AppBar Search Feature
- Card Usage
- ListView - Steady List
- GridView - Steady List
- ListView - Dynamic List
- GridView - Dynamic List
- Listing with FutureBuilder
- Detailed ListView.builder
- Detailed GridView.builder
- Using Tabs
- Using Bottom Navigation Bar
- Using the Drawer

Chapter 7: Flutter Storage Operations

- Using SharedPreferences
- SharedPreferences: Entry Counter Application
- Filing Procedures
- Introduction to Database
- SQL statements with DB Browser
- FOREIGN KEY queries with DB Browser
- Introduction to SQLite - Database Creation with DB Browser
- SQLite - Add Database on Android Studio

- SQLite - Setup
- SQLite - Modeling the Database with Dart Classes
- SQLite - Database Copy and Access
- SQLite - Data Logging and Reading Data
- SQLite - Data Deletion and Update
- SQLite - Record Control
- SQLite - Search
- SQLite - Fetch Single Data
- SQLite - Reading Limited Data
- SQLite - Reading Random Data
- Working SQLite with FutureBuilder
- People Application - Design
- People App - SQLite

Section 8: Advanced Flutter

- Creating Notifications

Section 9: Internet-Based Operations

- Restful Architecture
- Mysql Database on the Internet
- Writing Web Services with PHP
- Host a PHP Web Service
- Json Parse Process
- Json Parse Example 1
- Json Parse Example 2
- Json Parse Example 3
- http Library Introduction - Insert Process
- Update - Delete Process with Http
- Select Process with Http
- Http Working with FutureBuilder
- Firebase Realtime Database Login and Installation
- Firebase Realtime Database Insert - Delete and Update Operations
- Firebase Realtime Database Select Operations
- Firebase Working with FutureBuilder
- Firebase Operation with StreamBuilder
- People Application - Http
- Contacts Application - Firebase Realtime Database

Section 10: Location Operations

- Location Usage
- Map Usage

Prerequisites

To have basic computer skills.