

## **Flutter Training Course Content**

*“Get comprehensive training in Flutter and make yourself stand out in the crowd.”*

### **Course Objectives:**

- Understand the fundamentals of the Flutter framework
- Incorporate widgets and state into your app
- Use Flutter's tools to enhance your development process
- Customize your app with Material Design, themes, assets, and more
- Make your app interactive with text input, gestures, and more
- Retrieve local and real-time data from the web

### **Course Description:**

Developing for mobile platforms can be frustrating, and Flutter is Google's solution to make mobile development better. This course will teach you the basics of Flutter, including building a UI, using animations, and creating a app.

Flutter training course is designed to learn how to use Flutter to develop high-quality, interactive mobile applications both for iOS and Android devices. In this training course, you will learn how to how to code using Dart and build beautiful, fast, native-quality iOS and Android apps. Even if you have ZERO programming experience.

Whether you are a newbie in mobile app development, or experienced with other mobile app frameworks, you'll enjoy the high-velocity development and quality apps that Flutter enables. The course is intended for Front End Web Developer, Full Stack Web Developer, Java Developer, or anyone who want to learn Flutter app development fundamentals.

### **Course Content:**

#### **Module 1: Introduction**

- Introduction
- Importance of Flutter Introduction to Dart Writing Dart code
- Dart Pad
- Installing Dart SDK

#### **Module 2: Dart Programming Syntax**

- Introduction
- main () function
- Dart Variables
- Dart Data Types
- Input of Information to Dart Program
- Writing Comments
- Dart Conditional Operators
- If Statement
- If – Else Statement
- If...Else and Else...If... Statement
- If Else and Logical Operators
- For Loops

- Break Statement
- Switch Case Statement

### **Module 3: Dart Functions & Object-Oriented Programming (OOP)**

- Functions
- Function Structure
- Creating a Function
- Function Return Data Types
- Void Function
- Function Returning Expression
- Functions and Variable Scope
- Object-Oriented Programming (OOP)
- Objects and Classes
- Creating a Class
- Adding Methods to Classes
- Providing Constructors for Your Classes
- Class Inheritance
- Abstract Class
- Dart Project Structure and Dart Libraries

### **Module 4: All About Flutter**

- Understanding Flutter
- Flutter Framework
- Android Studio
  - What is Android Studio?
  - Android Studio Software Prerequisite
  - Installing Android Studio
- Flutter SDK
- Installing and Configuring Flutter SDK
- Creating a New Flutter Project
- Setup an Android Virtual Device
- Run a Flutter App
- Installing Flutter on Mac
- Test Your Flutter App on iOS Phone with Windows O.S
- Android Studio Sugar and Spice
- Run your Apps on a Hardware Device (Physical Phone)
  - Run your Flutter App on Android Phone
  - Run your Flutter App on Android Phone
- Emulator Debug Mode
- Introduction to Flutter Widgets
- Creating a Flutter App Using Widgets
- What is a Material App widget?

## Module 5: Flutter Widgets Fundamentals

- Scaffold Widget
- Image Widget
- Container Widget
- Column and Row Widgets
- Icon Widget
- Card Widget
- App Icons for iOS and Android Apps
- Hot Reload and Hot Restart
- Stateful and Stateless Widgets
- Use a Custom Font
- State management

## Module 6: Navigation and Routing

- Button Widget
- FloatingActionButton
- Elevated Button, and Icon Button
- Dropdown Button
- Outline Button
- Button Bar
- PopupMenuButtons
- App Structure and Navigation
- Navigate to a New Screen and Back
- Navigate with Named Routes
- Send and Return Data Among Screens
- Animate a Widget Across Screens
- Web View Widget in Flutter

## Module 7: Visual, Behavioral, and Motion-Rich Widgets Implementing

### Material Design Guidelines - Part 1

- Introduction
- BottomNavigationBar Widget
- DefaultTabController, TabBar, and TabBarView Widgets
- ListTile Widget
- ListView Widget
- Drawer Widget
- Stack Widget

### Material Design Guidelines - Part 2

- Text Field Widget.
- Checkbox Group and Radio Button Group Widgets
- Date Picker.
- Time Picker.
- Slider Widget.
- Switch Widget
- Dialogs

- Alert Dialog Widget
- Cupertino Alert Dialog Widget.
- Bottom Sheet.
- Snack Bar Widget.

## **Module 8: Api Integration**

- Introduction
- What is the JSON?
- What is the HTTP and dio?
- What is the Rest Api?
- Handling API Request and Response
- How to use Get, Post, Delete and Put methods in Api Integration
- API integration on the widget

## **Module 9: Placement Guide**

- What is an Interview?
- Tips to clear an Interview
- Common Interview questions and answers
- Flutter Interview Questions and Answers
- Resume Building Guide
- Start applying for Jobs