



## **Flutter App Development Certification Course Outline**

### **MODULE 1: Introduction to Flutter**

- What is Flutter and why it's popular for mobile app development
- Real-life example: A designer who can create apps for both iOS and Android with the same code
- Setting up Flutter on your computer (Flutter SDK, Android Studio)
- Exploring Flutter's widget-based architecture
- Activity: Create your first "Hello World" Flutter app

### **MODULE 2: Understanding Widgets and Layouts**

- What are widgets in Flutter and how they are the building blocks of an app
- Real-life example: Legos, where each piece builds part of the structure (widgets)
- Introduction to stateless and stateful widgets
- Basic layout widgets: Container, Column, Row, Stack
- Activity: Create a simple layout using multiple widgets

### **MODULE 3: Styling Your Flutter App**

- How to style widgets using the style property and custom themes
- Real-life example: Decorating a room with furniture and colors (styling)
- Using TextStyle, BoxDecoration, and other Flutter styling properties
- Activity: Style your app with custom fonts, colors, and padding

### **MODULE 4: Handling User Input in Flutter**

- Managing user input with TextField and other input widgets
- Real-life example: A login form where users type their username and password
- How to validate user input and show error messages
- Activity: Create a login form that collects user credentials

### **MODULE 5: Navigation and Routing in Flutter**

- What is navigation and how do you move between screens in Flutter?

- Real-life example: A map that guides you from one location to another (app navigation)
- Setting up Navigator and routing between pages
- Activity: Build an app with multiple screens and navigation between them

## **MODULE 6: Managing State in Flutter**

- What is state and why it's essential for interactive apps
- Real-life example: A shopping cart that updates when you add items (state management)
- Using StatefulWidget and setState() to manage state in Flutter
- Activity: Create a simple counter app that increases when you press a button

## **MODULE 7: Working with APIs and Data in Flutter**

- Fetching data from an API and displaying it in your Flutter app
- Real-life example: A weather app that shows live weather data from an API
- Using the http package to fetch and display data
- Activity: Build an app that fetches and displays a list of items from a mock API

## **MODULE 8: Final Project – Build a Complete Flutter App**

- Plan and build a fully functional app using Flutter
- Implement widgets, navigation, state management, and API integration
- Test your app on both Android and iOS simulators
- Activity: Present your app, demonstrating its key features

## **Bonus Material**

- Flutter cheat sheet with common widgets and commands
- List of Flutter plugins and packages to enhance your app
- Flutter developer resources and community links
- Interactive coding challenges and quizzes
- Certificate of Completion for Flutter Basics

+92-308-5145-822

[www.kidscourses.org](http://www.kidscourses.org)

info@kidscourses.org