

## **Dart & Flutter Mobile App Development**

### **OVERVIEW:**

Flutter is Google's UI toolkit for building beautiful, natively compiled applications for mobile, web, and desktop from a single codebase. The goal is to enable developers to deliver high-performance apps that feel natural on different platforms, embracing differences where they exist while sharing as much code as possible. It is Google's mobile app SDK, complete with a framework, widgets, and tools, that gives developers an easy way to build and deploy visually attractive, fast mobile apps on both Android and iOS platforms. It enables a smooth and easy cross-platform mobile app development.

React has become the hottest new library, and using it with Node and Express means a high level of harmony between the client and server. Throw MongoDB on for data storage, and you have

### **COURSE DURATION:**

- 40 hours
- Classes
  - Morning / Evening

### **COURSE SYLLABUS**

- ❖ Introduction and Installation
  - Introduction to Flutter
  - Introduction to cross platform mobile application
  - Project Structure
- ❖ Basics of Dart Programming Language
  - Hello World
  - Variables and Datatypes
  - Control flow statements
  - Functions
  - Comments
  - Imports and Classes
  - Async and Await
- ❖ Exploring Flutter
  - Flutter Hello World Application
  - Understanding Material

- Project Structure
- Concept of pub
- ❖ Understanding Widgets
  - Introduction to widgets
  - Text
  - Container
  - Row
  - Column
  - Buttons
  - Scaffold and many more.
  - Creating custom widget
- ❖ List of Items
  - Using Listviews
  - Using Listview builder
- ❖ Navigation
  - Using Navigator
  - Using Routes
  - Named Routes
- ❖ Basics of Stateful and Stateless widgets
  - Introduction to stateless widgets
  - Introduction to stateful widgets
  - Understanding setstate
- ❖ Using plugins and packages
  - Installing plugins on application
  - Using plugins ( image picker, camera etc)
- ❖ Data persistence
  - Shared Preferences
  - Using database
- ❖ HTTP request
  - Getting data from the remote server
  - Working with data and creating data models
- ❖ Projects we will be doing throughout the course
  - Todo App

- Crypto Currency Tracker
- Blog Application and many more.