Flutter & Dart App development

Why Flutter Certifications ?

Flutter is an open-source UI framework created by Google for creating high-quality iOS and Android apps.

Learn how to use Flutter to rapidly develop a mobile app that runs on both iOS and Android devices.

Training Solutions:

√ Offline Classroom Instructor-Led Training in our labs or onsite Locations.

√ Virtual Instructor-Led Training Via Virtual Video Conferencing Tools.

Why Learners Prefer CLS as their Training Services provider ?

■ Premuim Training Services Accredited from Global Technology Vendors.

■ Best Rated Experts & Certified Trainers in Egypt.

■ Official Training Hours, Practice Labs, Hands-on Learning.

■ CLS Training Classrooms are designed with High Edge PCs and Training Facilities.

■ Return on Training Investment is Guaranteed to boost performance.

- Build native-quality iOS & Android Apps with Flutter Course Outline :

  - Introduction to Development with Flutter
  - Learn to set up a new Flutter project using Android Studio.
  - Understand the Widget tree and learn to use pre-made Flutter Widgets for user interface design.
  - Learn to incorporate Image and Text Widgets to create simplemuser interfaces.
  - Learn to incorporate App Icons for iOS and Android.
  - Learn how to add and load image assets to Flutter projects.
  - Run Flutter apps on iOS Simulator, Android Emulator and physical devices
  - Creating UI with flutter
  - Use Hot Reload and Hot Restart to quickly refresh the app UI and understand when to use each.
  - Learning to use the Pubspec.yaml file to incorporate dependencies, custom assets and fonts.
  - An introduction to the Widget build() method.
  - Learning to use layout widgets such as Columns, Rows, Containers and Cards.
  - Incorporating Material icons using the Icons class.
  - Building Apps with State
  - Understand the difference between Stateful and Stateless Widgets and when they should each be used.
  - Understand how callbacks can be used detect user interaction in button widgets.
  - Understand the declarative style of UI programming and how Flutter widgets react to state changes.
  - Learn to import dart libraries to incorporate additional functionality.
  - Learn about how variables, data types and functions work in Dart 2.
  - Build flexible layouts using the Flutter Expanded widget.
  - Understand the relationship between setState(), State objects and Stateful Widgets.
  - Leveraging Flutter Packages
  - Learn to use the Dart package manager to incorporate Flutter compatible packages into your projects.
  - Understanding the structure of the pubspec.yaml file.
  - Incorporate the audioplayers package to play sound.
  - Learn more about functions in Dart and the arrow syntax.
  - Learn to refactor widgets and understand Flutter's philosophy of UI as code.
  - Structuring Flutter Apps
  - Learn about how lists and conditionals work in Dart.
  - Learn about classes and objects in Dart and how it apply to Flutter widgets.
  - Understand Object Oriented Dart and how to apply the fundamentals of OOP to restructuring a Flutter app.
  - Learn to use Dart Constructors to create customisable Flutter widgets.
  - Apply common mobile design patterns to structure Flutter apps.
  - Learn about structuring and organising Flutter apps.
  - Learn to use Dart mixins to extend class functionality.
  - Incorporate Firebase Cloud Firestore into your Flutter apps.
  - Implement authentication in your Flutter apps with the Firebase Auth package.
  - Build a scrolling ListView widget to learn how Flutter creates and destroys reusable elements.
  - Understand Dart Streams to listen to data changes.
  - Learn to use the Flutter StreamBuild to turn streams of data into widgets that can be rendered.

- Overview:

  - Quickly install the framework, IDE and other tooling to start developing
  - Understand and use Google's Dart language to quickly prototype a mobile app
  - Test and deploy mobile apps that run on both iOS and Android using a single code base
  - Customize the app using a rich set of widgets, layouts and animations

- Training:

  - Flutter vs other cross-platform frameworks
  - Installing Flutter
  - Overview of Flutter Features and Architecture
  - Choosing an IDE
  - Using the Dart Programming Language
  - Creating an Application
  - Using Templates and Scaffolding
  - Working with Widgets (Stateless vs Stateful)
  - Creating the User Interface
  - Reloading the App while Maintaining State (Hot Reloading)
  - Customizing the App with Layouts, Painting, and Animation
  - Adding Packages and Plugins
  - Accessing the Native Platform's APIs
  - Testing the Appp
  - Troubleshooting

- Audience Profile :

Who should enroll

  - Java Developers
  - Front End Developers
  - Full Stack Developers
  - Mobile Application Developers
  - Aspiring Software Developers
  - iOS Developers
  - Android Developers
  - Web Application Developers

- Prerequisites:

  - Knowledge of native android development if they intended to develop fine and detailed applications
  - An understanding of languages like Java and C++ that are based on OOPS concepts. It is imperative to be thorough with them.
  - Experience with Dart programming before attempting to learn Flutter. Dart is Google’s general-purpose programming language.