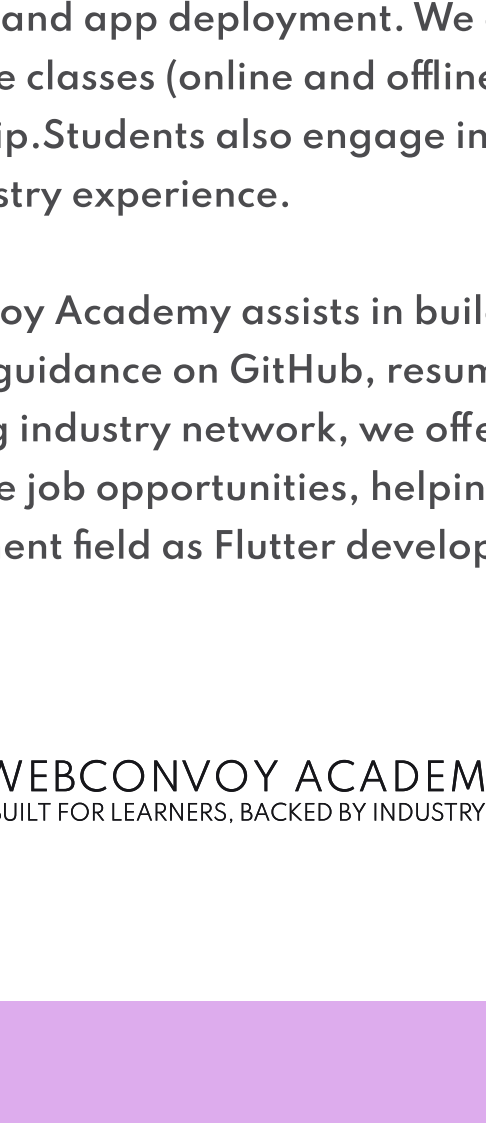


#1 IT INSTITUTE

- DATA SCIENCE
- DATA ANALYSIS
- FRONT END
- UI/UX
- BACK END
- ANDROID / IOS
- WEBSITE DESIGNING
- SOFTWARE TESTING
- C/C+/JAVA/PYTHON
- AI/ML
- DIGITAL MARKETING



FLUTTER

Mobile Development Course Curriculum

4 month

Online & Offline

WHY LEARN FLUTTER DEVELOPMENT?

Flutter is a powerful open-source framework by Google that lets you build cross-platform mobile apps with a single codebase. Instead of creating separate apps for Android and iOS, Flutter allows faster development, beautiful UIs, and native performance all in one go. It's in high demand, beginner-friendly, and ideal for developers looking to build mobile apps efficiently and cost-effectively.

CAREER IN FLUTTER

Some of the job roles associated with Flutter development include Flutter Developer, Mobile App Developer, Cross-Platform App Developer, Android/iOS Developer (Flutter), Front-End Mobile Engineer, UI Developer (Mobile), Software Engineer – Mobile, Dart Developer, App UI/UX Developer, Mobile Application Designer, Freelance Flutter Developer, and Hybrid App Developer, among others.

At **WebConvoy Academy**, we believe that great outcomes start with great planning. Our team regularly comes together to brainstorm, evaluate, and improve how we train our **students** both **technically** and **professionally**.

Flutter Course Overview

- ✓ **Executive Program 4 Months**
Build real mobile apps with Flutter in 4 months.
- ✓ **Project Internship - 2 Months (Unpaid)**
Gain real-world experience with a 2 Months (Unpaid) Flutter project internship.
- ✓ **Online Class & Offline Class**
Flexible learning with both online and offline Flutter classes available.
- ✓ **Portfolio Development**
Build a strong Flutter portfolio with real-world projects and expert guidance.
- ✓ **1:1 Mentorship & Doubt Support**
Personalized 1:1 mentorship and instant doubt support throughout your Flutter journey.



TOPIC-WISE CURRICULUM

KEY FEATURES



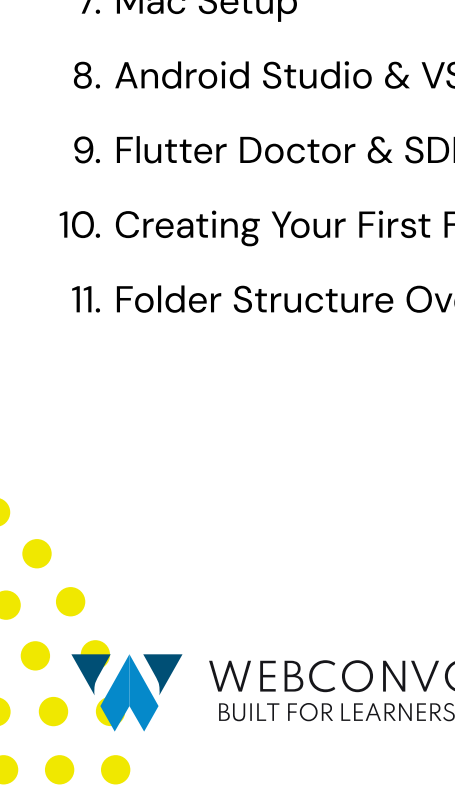
WEEKLY DOUBT SESSION



PERSONAL MENTORSHIP

PROFESSIONAL DEVELOPMENT

1 MONTH MOCK INTERVIEW & RESUME PREPARATION



Flutter Training Curriculum

Week 1

Introduction to Flutter & Setup

1. What is Flutter?
2. Features of Flutter
3. Pros & Cons of Flutter
4. Flutter Architecture
5. Installation & Environment Setup
6. Windows Setup
7. Mac Setup
8. Android Studio & VS Code
9. Flutter Doctor & SDK Setup
10. Creating Your First Flutter App
11. Folder Structure Overview

Week 2

Dart Programming Language

1. Introduction to Dart
2. Variables & Data Types
3. Operators & Expressions
4. Control Flow (if, switch, loops)
5. Functions & Arrow Syntax
6. Object-Oriented Programming
7. Classes & Objects
8. Inheritance
9. Mixins & Abstract Classes
10. Getters/Setters
11. Exception Handling
12. Collections: List, Set, Map
13. Asynchronous Programming
14. Futures, async/await
15. Streams

Week 3

Flutter UI & Layouts

1. Understanding Widgets & Widget Tree
2. Stateless vs Stateful Widgets
3. Widget Build Lifecycle
4. Basic Widgets: Text, Image, Icon, Button
5. Layout Widgets
6. Single Child Widgets (Container, Padding, Align, Center)
7. Multi Child Widgets (Column, Row, Stack, ListView, GridView)
8. Input Widgets (TextField, Checkbox, Radio, Switch)
9. Forms & Form Validation
10. Styling & Themes
11. Fonts & Colors
12. MediaQuery & Screen Responsiveness

Week 4

Gestures & Navigation

1. GestureDetector & Common Gesture Widgets
2. Handling User Input
3. Navigation Concepts
4. Navigator.push / pop
5. Named Routes
6. RouteGenerator
7. Passing Data Between Screens

Week 5

State Management

1. Ephemeral (local) State
2. Application-wide State
3. Provider Pattern
4. Riverpod (Optional)
5. Other Patterns: ScopedModel, BLoC (Optional Overview)

Week 6

Packages & Plugins

1. Using Pub.dev
2. Adding & Using Packages
3. Creating Custom Packages & Plugins
4. Platform-Specific Code (Android & iOS)

Week 7

Networking & APIs

1. HTTP Requests (using http or dio)
2. Calling REST APIs
3. Parsing JSON Data
4. Displaying API Data in UI
5. Using Models & Serialization

Week 8

Data Persistence

1. Shared Preferences
2. SQLite Local Database
3. NoSQL with Firebase Firestore
4. CRUD Operations
5. Firebase Setup (Basic)

Week 9

Animations

1. Implicit Animations
2. Explicit Animations
3. Hero Animations
4. AnimationBuilder
5. Custom Animations

Week 10

Localization & Internationalization

1. Adding intl Package
2. Localizing Text and Widgets
3. Multi-language App Support
4. Locale Switching

Week 11

Data Persistence

1. Unit Testing
2. Widget Testing
3. Integration Testing
4. Using Flutter Test Package
5. Test Driven Development Basics

Week 12

Deployment & Tools

1. Building APK/IPA Files
2. Flutter DevTools
3. Debugging Techniques
4. Performance Optimization
5. Deployment on Android & iOS
6. Play Store & App Store Basics