



# Mobile Training Course

**Course Duration: 8 Weeks**

## Course Overview

- Duration: 8 weeks
- Daily Schedule:
  - Theory (1.5 hours)
  - Live coding demonstration (1 hour)
  - Hands-on practice (2.5 hours)
  - Q&A and troubleshooting (1 hour)
- Development Environment: Android Studio/VS Code, Flutter SDK, Android/iOS Emulators

## About Course

Master the art of mobile app development using Flutter, Google's revolutionary framework for building beautiful native apps. In just 2 months, go from complete beginner to confident mobile app developer through our intensive, hands-on training program.

## Why Choose This Course?

- **Cross-Platform Development:** Learn once, deploy everywhere - build apps for both iOS and Android with a single codebase
- **Industry-Relevant Skills:** Gain highly sought-after skills in one of tech's fastest-growing frameworks
- **Practical Approach:** Build real-world applications from day one
- **Job-Ready Portfolio:** Graduate with multiple complete applications to showcase to potential employers



## What You'll Learn

- Dart programming language fundamentals
- Flutter framework and widget system
- UI/UX design principles for mobile apps
- State management and data handling
- API integration and local storage
- App deployment and publication basics



## Course Highlights

- **Structured Learning Path:** Carefully designed curriculum progressing from basics to advanced concepts
- **Project-Based Learning:** Build 5+ mini-projects and 1 major project
- **Interactive Sessions:** Daily live coding and Q&A sessions
- **Small Batch Size:** Limited seats to ensure personalized attention
- **Hands-on Practice:** 60% practical, 40% theory
- **Real-World Applications:** Focus on current industry practices and standards



## Tools & Technologies Covered

- Flutter SDK
- Dart Programming Language
- Android Studio/VS Code
- Git for version control

- Firebase (Backend Services)
- REST APIs
- Local Storage Solutions

## **Projects You'll Build**

### **1. Mini Projects**

- Profile Display App
- Todo Application
- Weather App
- Shopping List Manager
- Photo Gallery

### **2. Final Project Options**

- Social Media App
- E-commerce Application
- Task Management System
- Food Delivery Interface
- Fitness Tracking App

## **Month 1: Dart & Flutter Fundamentals**

### **Week 1: Dart Programming Basics**

- **Day 1: Introduction**
  - Setting up development environment
  - Dart SDK installation
  - First Dart program
  - Basic syntax and structure
- **Day 2-3: Dart Fundamentals**
  - Variables and data types
  - Operators

- Control flow (if/else, loops)
- Functions and parameters
- Practice: Command-line calculator
- **Day 4-5: Object-Oriented Programming in Dart**
  - Classes and objects
  - Constructors
  - Inheritance
  - Encapsulation
  - Practice: Building a simple class hierarchy

## **Week 2: Advanced Dart & Flutter Introduction**

- **Day 1-2: Advanced Dart**
  - Lists, Sets, and Maps
  - Exception handling
  - Async programming basics
  - Null safety
  - Practice: Data manipulation exercises
- **Day 3-5: Flutter Basics**
  - Flutter installation and setup
  - Understanding widgets
  - Basic app structure
  - Hot reload/restart
  - First Flutter app
  - Practice: Hello World app with basic widgets

## **Week 3: Flutter Widgets & UI**

- **Day 1-2: Basic Widgets**
  - MaterialApp and Scaffold
  - Text and TextStyle

- Buttons and their types
- Container and padding
- Practice: Profile card app
- **Day 3-4: Layout Widgets**
  - Row and Column
  - Stack
  - ListView
  - GridView
  - Practice: Social media feed layout
- **Day 5: Styling & Theming**
  - Working with colors
  - Custom themes
  - Material Design basics
  - Practice: Theme switcher app

## **Week 4: Interactive Flutter Apps**

- **Day 1-2: Stateful Widgets**
  - Understanding state
  - setState
  - Lifecycle methods
  - Practice: Counter app with custom features
- **Day 3-4: User Input & Forms**
  - TextField and TextFormField
  - Form validation
  - Input formatting
  - Practice: Registration form
- **Day 5: Navigation**
  - Routes and navigation

- Passing data between screens
- Navigation patterns
- Practice: Multi-screen app

## Month 2: Advanced Concepts & Project Development

### Week 5: Data & State Management

- **Day 1-2: Local Storage**
  - Shared Preferences
  - File storage
  - SQLite basics
  - Practice: Todo app with persistence
- **Day 3-4: State Management**
  - Provider package
  - State management concepts
  - App state vs local state
  - Practice: Shopping cart implementation
- **Day 5: API Integration**
  - HTTP package
  - RESTful APIs
  - JSON parsing
  - Practice: Weather app

### Week 6: UI/UX & Advanced Features

- **Day 1-2: Advanced UI**
  - Custom widgets
  - Animations basics
  - Gestures

- Practice: Animated card deck
- **Day 3-4: Platform Integration**
  - Camera access
  - Location services
  - File picker
  - Practice: Photo sharing app
- **Day 5: App Polish**
  - Error handling
  - Loading states
  - Snackbars and dialogs
  - Practice: Polishing previous apps

## **Week 7: Project Development**

- **Day 1: Project Planning**
  - Choosing project
  - Wireframing
  - Feature listing
  - Database design
- **Day 2-5: Project Implementation**
  - UI development
  - Feature implementation
  - State management
  - Data persistence
  - Testing and debugging

## **Week 8: Project Completion & Deployment**

- **Day 1-3: Project Finalization**
  - Feature completion
  - Bug fixing

- Performance optimization
- UI polish
- **Day 4: Testing & Documentation**
  - App testing
  - Code documentation
  - README creation
- **Day 5: Deployment**
  - Building for Android/iOS
  - Understanding app stores
  - Deployment process
  - Project presentations

## Final Project Options

1. Social Media Clone
2. E-commerce App
3. Task Management App
4. Food Delivery App Interface
5. Fitness Tracking App

## Mini-Projects Throughout Course

1. Profile Card App
2. Todo List
3. Weather App
4. Shopping List
5. Photo Gallery

## Assessment Methods

1. Weekly coding assignments (30%)
2. Mini-projects (30%)



### 3. Final project (40%)

## Key Topics Covered

- Dart programming fundamentals
- Flutter widget system
- State management
- Local data storage
- API integration
- UI/UX design principles
- App deployment basics

## Learning Resources

- Official Flutter documentation
- Code repositories
- UI design resources
- API documentation