


Flutter Development Bootcamp

 Ts-Developers.com

 Prepared by: Abdul Basit

 WhatsApp: 0307-5630721

◆ **Module 1: Flutter & Dart Fundamentals (Weeks 1-2)**

- Introduction to Flutter & Setup (Android Studio, VS Code, SDK)
- Understanding Flutter Architecture & Widgets
- Dart Programming Basics (Variables, Data Types, Operators, Functions)
- Conditional Statements & Loops
- Lists, Maps & Collections in Dart
- Basic Flutter Widgets (Text, Image, Button, Column, Row)
- Layouts & Containers
- Mini Project: Digital Visiting Card App

◆ **Module 2: UI Design & State Management Basics (Weeks 3-4)**

- Material Design & Theming
- Navigation & Routes (Single Screen → Multi Screen Apps)
- Forms & User Input Handling
- State Management Basics (setState, Stateful vs Stateless Widgets)
- Working with Assets (Images, Fonts, Icons)
- Mini Project: Multi-Screen To-Do List App

◆ **Module 3: APIs & Data Handling (Weeks 5-6)**

- Introduction to REST APIs
- Using http Package to Fetch Data
- JSON Parsing in Flutter
- ListView, GridView & Dynamic UI
- Error Handling & Loading States
- Mini Project: Weather App (Fetch Live Data from API)

◆ **Module 4: Local Storage & Firebase (Weeks 7-8)**

- Shared Preferences (Storing Small Data Locally)
- SQLite Database (CRUD Operations)
- Introduction to Firebase
- Firebase Authentication (Signup/Login)

- Firebase Firestore Database (Read/Write Data)
 - Mini Project: Notes App with Firebase
-

◆ **Module 5: Advanced Flutter Features (Weeks 9–10)**

- State Management with Provider / Riverpod (Intro)
 - Animations & Transitions
 - Working with Streams
 - Push Notifications (Firebase Cloud Messaging)
 - Mini Project: Chat App with Firebase
-

◆ **Module 6: Final Project Development (Weeks 11–12)**

- Project Planning & Requirement Analysis
- UI/UX Wireframing
- Full Stack Implementation (Flutter + Firebase/API)
- Testing & Debugging
- Deployment to Play Store
- Final Project Submission & Certification

✦ **Suggested Final Projects:**

- E-commerce Shopping App
- Online Food Delivery App
- Social Media Mini Clone
- News Aggregator App
- Learning Management App