

# Flutter Roadmap for Android & iOS

## STAGE 1: Basics (You've completed Dart Basics!)

- ' Variables, functions, classes
- ' Null safety
- ' Futures, async/await, streams

## STAGE 2: Flutter Fundamentals

- ' Project Setup: Install SDK, create app, folder structure
- ' Widgets & UI: StatelessWidget, StatefulWidget, Layouts
- ' User Input: TextField, Forms, Buttons, Inputs
- ' Navigation: Navigator, named routes
- ' Theming: ThemeData, Light & Dark mode

## STAGE 3: Intermediate Development

- ' State Management: setState, Provider, Riverpod, BLoC
- ' API Integration: http, dio, JSON parsing
- ' Local Storage: SharedPreferences, Hive, SQFlite
- ' Firebase: Auth, Firestore, Messaging, Storage
- ' App Architecture: MVVM, Clean Architecture

## STAGE 4: Advanced Concepts

- ' UI & Animations: Custom widgets, AnimationController, Hero, Lottie
- ' Native Features: Camera, Location, Permissions, Background tasks
- ' In-App Purchases & Ads
- ' Notifications: flutter\_local\_notifications, FCM
- ' App Lifecycle handling

## STAGE 5: Deployment & Maintenance

- ' Testing: Unit, Widget, Integration tests
- ' Performance Optimization: DevTools, Lazy loading, Reduce app size
- ' Build & Release: Android (APK/AAB), iOS (TestFlight/App Store)
- ' CI/CD: GitHub Actions, Codemagic, Bitrise

## **BONUS: Multi-Platform Expansion**

- ' Flutter Web
- ' Flutter Desktop (macOS, Windows, Linux)
- ' PWAs and responsive layout