



Complete Flutter Mobile App Development Course with Dart & Firebase Training Course

25 – 29 July 2027
Johannesburg



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Ref: 103600343_80494 **Date:** 25 – 29 July 2027 **Location:** Johannesburg **Fees:** 4500 Euro

Course Overview:

In today's competitive digital economy, businesses demand mobile apps that are fast, scalable, and available across platforms. The Complete Flutter Mobile App Development Course with Dart & Firebase equips professionals with the tools and knowledge to build cross-platform applications using Google's Flutter SDK and Dart language. This course is designed with a hands-on approach and focuses on building real-world applications while integrating Firebase for real-time backend services.

Participants will learn how to design beautiful, responsive user interfaces, manage application state effectively, and deploy high-performance apps for both iOS and Android from a single codebase. The curriculum draws from top flutter mobile app development resources and reflects current industry trends. Through practice-based learning, guided examples, and curated use cases, participants will build confidence in applying concepts such as firebase integration, mobile app design, state management, and application deployment.

Target Audience:

- Mobile App Developers
- Junior and Mid-Level Software Engineers
- Full-Stack Developers expanding into mobile
- IT Support transitioning to app development
- Entrepreneurs and product owners building MVPs

Targeted Organizational Departments:

- Information Technology
- Software Development
- Digital Innovation Units
- R&D and Engineering
- Marketing teams focused on app-based campaigns

Targeted Industries:

- Information Technology and Software Services
- Financial Technology FinTech
- Healthcare and Medical Technology
- E-commerce and Online Retail
- Education Technology and E-learning
- Transportation and Logistics

Course Offerings:

By the end of this course, participants will be able to:

- Build mobile apps using Flutter for both Android and iOS
- Write clean, efficient code using the Dart programming language
- Apply flutter mobile app development best practices in real projects
- Design responsive user interfaces using layout widgets and theming
- Manage application state using Provider, Riverpod, or setState
- Integrate Firebase for login, data storage, and notifications
- Test, debug, and publish apps to the Play Store and App Store
- Apply design thinking and product logic to cross-platform apps

Training Methodology:

This course applies interactive and experiential learning methods that blend theoretical instruction with practical implementation. Each session includes an instructor-led walkthrough, hands-on practice with flutter mobile app development tools, and group-based activities to encourage collaborative problem solving.

Participants will work through structured exercises, mini-projects, and a final capstone application project. Case studies of real apps demonstrate design decisions, firebase integration, user experience, and scalability. Feedback sessions allow learners to receive instructor and peer input. Self-assessment tasks help participants reflect on their progress. By the end of each day, learners will have applied flutter development concepts directly into working app modules using dart syntax, firebase services, and app testing practices.

Course Toolbox:

- Flutter SDK setup guide
- Dart syntax reference
- Firebase authentication and database samples
- Sample UI templates and layout structures
- App testing, debugging, and deployment checklist
- Git workflow and version control examples
- Reading materials: curated articles, book excerpts, and PDF tutorials
- App performance optimization checklists

Course Agenda:

Day 1: Foundations of Flutter and Dart

- Topic 1: Overview of Flutter architecture and capabilities
- Topic 2: Installing and configuring Flutter SDK and IDEs
- Topic 3: Dart language basics and syntax
- Topic 4: Creating your first Flutter app
- Topic 5: Using hot reload and debugging tools
- Reflection & Review: Key concepts, setup validation, and Q&A

Day 2: Widgets, Layouts, and Navigation

- Topic 1: Exploring Flutter widgets: Stateless and Stateful
- Topic 2: Building layouts with Row, Column, Stack
- Topic 3: Creating adaptive designs for multiple screen sizes
- Topic 4: Implementing navigation and screen routing
- Topic 5: Handling forms and user inputs
- Reflection & Review: UI structure, best practices, and user experience

Day 3: State Management and Firebase Integration

- Topic 1: Understanding app state and lifecycle
- Topic 2: Using setState, Provider, and Riverpod
- Topic 3: Integrating Firebase Authentication
- Topic 4: Working with Firestore and real-time databases
- Topic 5: Managing data flow with async, FutureBuilder, and StreamBuilder
- Reflection & Review: Backend connectivity and app logic



Day 4: UI/UX and Advanced Development

- Topic 1: Customizing themes and styles
- Topic 2: Using Material Design and Cupertino widgets
- Topic 3: Error handling, testing, and debugging
- Topic 4: Performance optimization and code refactoring
- Topic 5: Managing dependencies and packages
- Reflection & Review: Design review and performance insights

Day 5: App Deployment and Capstone Project

- Topic 1: Preparing your app for release
- Topic 2: Publishing to the Google Play Store and Apple App Store
- Topic 3: CI/CD overview using GitHub Actions
- Topic 4: Building a complete app from idea to deployment
- Topic 5: Firebase analytics and app monitoring
- Reflection & Review: Final project presentations and feedback

FAQ:

What specific qualifications or prerequisites are needed for participants before enrolling in the course?

Participants should have a basic understanding of programming concepts. Prior experience in JavaScript, Java, or any object-oriented language is helpful, but not required.

How long is each day's session, and is there a total number of hours required for the entire course?

Each day's session is structured to last around 4-5 hours, including short breaks and interactive activities. The full course spans five days and includes 20-25 hours of instruction.

Can participants build and deploy real apps by the end of the course?

Yes. The course is structured so participants build working apps during the training, using flutter mobile app development tools and firebase integration to produce a complete deployable project.

How This Course is Different from Other Flutter Courses:

This course is uniquely designed for corporate environments and professional developers aiming to deliver real-world mobile applications. Unlike self-paced online videos, it provides live instruction, structured feedback, and group-based exercises tailored to enterprise workflows.



AGILE LEADERS
Training Center

Rather than just teaching syntax, it emphasizes the full development lifecycle — from dart programming and UI design to firebase backend and mobile deployment. It also integrates agile practices, collaborative coding, and problem-solving strategies often used in actual app teams. With curated flutter mobile app development resources, real use-case projects, and detailed firebase integration modules, this course equips participants with practical and transferable skills needed to succeed in today's app-driven industries.