



10-Week Curriculum

Week 1 -- Onboarding & OOP + SOLID

- Introduce program, rules and communication.
- OOP & SOLID
- 📖 **Reading:** *The Object-Oriented Thought Process*

Week 2 -- Clean Architecture + Widget Tour

- Clean Architecture
- Flutter Widget Catalog tour + playground app for new widgets
- 🧩 **Problem Solving**

Week 3 -- State Mgmt + DI + Networking

- State management (Bloc / Cubit)
- Dependency Injection
- Networking & APIs (Dio/Retrofit + JSON Models + Error handling)
- Demo: Small functional app applying All of these + Clean Architecture
- 📖 **Reading:** *Grokking Algorithms*

Week 4 -- Git Workflow + Testing

- Branching strategies (GitFlow)
- Pull Requests + Code Review best practices
- Testing in Flutter (Unit, Widget, Integration) + Demo App
- 🧩 **Problem Solving:** practice

Week 5 -- CI/CD + Firebase + Analytics

- CI/CD deep dive
- Flavors & environment setup
- Firebase Crashlytics + Analytics tools + Marketing tools (e.g. Sentry, Adjust, CleverTap, MoEngage, etc.)
- 📖 **Reading:** *رائد الأعمال Inside Out*

Week 6 -- Product Awareness + Theming + Caching + Maps

- Product mindset: *"Code is just part of the picture"* (session)
- Theming (Light/Dark modes, custom themes)
- Play with Maps
- Caching, Pagination, Secure & Refresh Token + demo app
- 📖 **Problem Solving:** practice

Week 7 -- Design Patterns + Native Basics

- Most important Design Patterns in Flutter
- Quick intro to Native Android Development + mini app
- 📖 **Reading:** *Head First Design Patterns*

Week 8 -- DS & Algorithms + More Topics in Flutter

- Data Structures & Algorithms study + practice
- Deep Linking, Payment, and Flutter Performance Optimization (DevTools: CPU Profiler, Memory, Frame rendering)
- 📖 **Reading:** Continue *Head First Design Patterns*

Weeks 9 & 10 -- Graduation Project

- Full graduation project applying everything learned
- Prepare presentation
- Wrap-up and feedback session
- 📖 **Problem Solving:** practice

🎓 By the end of this program, your level will be higher than most seniors in the market, and this is not a joke.