MOHAMED HELMY

Android software engineer

mohelmy.eng@gmail.com +20 115 903 1482 Cairo, Egypt linkedin.com/in/mo-helmy

github.com/Helmy2

Summary

Android Software Engineer specializing in building modern, user-centric applications with Kotlin and Jetpack Compose. Experienced in Clean Architecture, MVI, and multiplatform development, with a proven ability to deliver high-quality, performant, and testable code.

WORK EXPERIENCE

Android Software Engineer. Internship, *Areeb Technology* 07/2025 – Present
Cairo, Egypt

- Contribute to the core architecture and UI implementation of a feature-rich e-commerce application using Jetpack Compose.
- Engineer and integrate key user-facing features, including authentication and product management, by interfacing with backend services via GraphQL.
- Enhance code quality and application robustness by writing comprehensive Unit and UI tests to maintain high test coverage for critical business logic.
- Conducted research and delivered a presentation to the engineering team on emerging mobile strategies, providing an analysis of Kotlin Multiplatform (KMP) and its potential company-wide impact.
- Received formal training in SOLID principles, code review best practices, quality assurance, and agile project management as part of the internship program.

Android Software Engineer, *Freelance* 06/2025 – Present
Remote

- Developed and delivered a complete, offline-first Point-of-Sale (POS) and ERP system for a freelance client, targeting both Android and Desktop platforms using Kotlin Multiplatform.
- Engineered a robust offline-first strategy using a local Room database that intelligently synchronizes with a Supabasebackend, ensuring data integrity and availability.
- Implemented a clean, scalable MVI architecture, resulting in a highly maintainable and testable codebase.

EDUCATION

B.Sc. in Computer Science, *Benha University* 06/2023
GPA: 3.24

- Key Coursework: Data Structures & Algorithms, Software Engineering & Design Patterns, Advanced Mobile Application Development, Machine Learning & Data Analysis
- *Graduation Project: Diabetes Health Indicators* - Researched and developed a machine learning solution to predict diabetes. Analyzed a dataset of health metrics, engineered features, and evaluated multiple classification models, achieving high predictive accuracy.

SKILLS

Programming Languages: Java, Kotlin

Architecture & Principles: Clean Architecture, MVI, MVVM, SOLID Principles, OOP, Design Patterns

UI: Jetpack Compose, Compose Multiplatform, XML, View Binding

Frameworks & Core Libraries: KMP, Coroutines, Flow,, Hilt, Koin, WorkManager, LiveData

Data & Networking: Room, Ktor, Retrofit, GraphQL, Firebase (Auth, Firestore, Realtime DB, FCM), Supabase (Auth, DB, Realtime Sync)

Tools & Version Control: Git, GitHub, Android Studio, Gradle

Soft Skills: Adaptability, Agile, Communication, Problem-solving, Teamwork, Technical Leadership, Strategic Analysis

PROJECTS

CrossCart
Leveraged Compose Multiplatform to develop a single codebase for Android, iOS, and Desktop, significantly reducing development time. Implemented a clean, MVI architecture and real-time data synchronization with Supabase.

ShowMagnet
Solved performance challenges with large datasets by implementing the Paging 3 library, resulting in a smooth, responsive UI for Browse extensive movie catalogs.

LocationReminder
Engineered a reliable offline-first experience using Room for local data storage, ensuring users receive critical, location-based reminders without an internet connection.

IoT Environmental Monitor
Engineered a full-stack IoT solution where an ESP8266 sensor streams real-time data to Firebase, displayed in a native Android app with a live dashboard and push notifications.

CERTIFICATIONS

Android Developer Track — Digital Egypt Builders Initiative (DEBI)

Android Application Developer Track — ITI

Advanced Android Nanodegree — Udacity & FWD

CS50 — Harvard University

Algorithmic Toolbox — Coursera

Machine Learning Specialization — DeepLearning.AI (Coursera)