

Muhammad Helmi

Software Engineer (Android)

EXPERIENCE

STC Bank, Saudi Arabia — Senior Android Developer

February 2023 – Present

As a Senior Android Developer at STC Bank, I have driven the development and maintenance of high-impact mobile applications, including the **stc pay** app (**10M+ users**) and the **STC Bank** app (**2M+ users** within months of launch). My contributions extend to setting app architecture standards, implementing cutting-edge technologies, and leading the development of key features to enhance user experience and scalability.

- Architected the **STC Bank app** using **MVI architecture** and **Clean Architecture**, introducing **Jetpack Compose**, **Kotlin Flow**, and **unit testing** in the organization.
- Acted as **Team Lead** during the lead's absence, managing team priorities, coordinating cross-functional collaboration, and ensuring timely delivery of critical milestones.
- Played a pivotal role as a **Code Review Committee member**, establishing architecture guidelines, enhancing code quality, and automating reviews through **static code analysis**, **Git hooks**, and **GitLab pipelines**.
- Led the development of critical features, including **KYC**, **New Home Screen**, **Minor Account**, **Saving Account**, and **Freeze Account**, as well as innovative features like the **Eidya Spinning Game**, a real-time multiplayer experience built with **Jetpack Compose**, **Canvas**, and socket connections.
- Collaborated with the UI/UX team to design and implement a **scalable design system** with multi-theme support tailored to STC Bank's branding needs.
- Developed a centralized error-handling system, addressing complex backend-UI challenges such as **OTP** and **IVR flows**.
- Spearheaded the **Kotlin Multiplatform (KMP)** initiative to create a shared library for Android and iOS platforms, overseeing library development, publishing, and technical documentation.

Lean Business Services, Saudi Arabia — Sr. Android Developer

November 2020 – February 2023

Participating in a team to develop and maintain the most widely used applications in Saudi Arabia in the medical sector (Sehhaty - Anat). Sehhaty App aims to increase access to healthcare, improve standards of healthcare, and increase health awareness in the community.

Anat App is an essential solution for all medical practitioners to keep track of all the info they need in their professional careers.

- Rebuilt the codebase using the newest technologies in the market for both apps.

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TECHNOLOGIES AND SKILLS

Programming Languages

- Java.
- Kotlin.
- Dart.

Architecture Patterns

- Clean Architecture.
- MVI, MVVM.
- MVC, MVP.
- BLoC.

Tools and Third-Party Libraries

- Android Architecture Components.
- ViewModel, LiveData, and Lifecycle.
- Room Database, Navigation Component, and Paging3.
- Jetpack Compose and Material Design3.
- DataBinding, ViewBinding.
- Kotlin Coroutines, and Flow.
- Reactive Extensions (RxJava2).
- Dependency Injection (Dagger2, Hilt, Koin).
- RESTful Web Services (OkHttp, Retrofit, Ktor, Volley).
- Version Controlling (Git, Git Flow).
- Google Services, and Firebase.
- Branch.io, MyFatoorah, and Stripe.
- Agile Tools (JIRA, Trello, Asana, Gitlab boards).
- Analytics and Reporting Tools (Crashlytics, Google Analytics).
- Unit tests (JUnit, Mockk, Maestro)
- Static Code Analysis (kLints, and Android Lints)
- CI/CD (Fastlane, Gitlab pipelines)

Latest PROJECTS

- Revamped the Sehhaty app from a single module application to the modularization world.
- Used Clean Architecture based on MVVM with Coroutines, Flow, and Jetpack components.
- Set up CI/CD using Fastlane to connect with Google Play Store and Firebase App Distribution.

Sharing Group, Kuwait — Sr. Android Developer

January 2020 – October 2020

Leading a team to develop a full solution (Lean Restaurants) that digitizes all of the restaurant's operations, including ordering, customizing, and delivering food to the customer's doorstep.

- Divided the full solution into several applications (Menu App, Cashier App, Waiter App).
- Used Clean Architecture based on MVVM with RxJava and Jetpack components, and utilized the single activity concept.
- Responsible for code versioning (git, git-flow), code review, and deployment.
- Added support for multiple languages, offline storage, and dark theme.
- Added real support for tablets with split-screen and support for multi-screen sizes.
- Developed a Flutter app, "Kuwaiti Restaurants" for Android and iOS platforms.

Converted.In, Egypt — Sr. Android Developer

February 2019 – July 2020

Developed an Android SDK that works as customers' data collection touchpoints using low-level implementations, and built a loyalty wallet system consisting of two apps that use Foursquare Pilgrim SDK for geofencing to provide the user a location intelligence experience and much more, including:

- Added a feature that displays a merchant's catalog/menu with a chat-bot to help users fill their cart and checkout the order, which increased sales by almost 20%.
- Handle payments using Stripe SDK, phone verification using SMS, and QR code generation and scanning.
- Used MVVM architecture pattern with Jetpack suite, RxJava, and Dagger.
- A data layer with a repository and two data sources (local using Room and remote using Retrofit).
- Built a UI-driven system to push UI components by sending notifications to capture users' feedback by prompting them with a survey.
- Created well-organized and easy-to-understand documentation for the SDK.

Offers Tourism, Kuwait — Android Developer

December 2018 – July 2019

Working on a product that provides users with tourism offers and packages within the Gulf area, my main responsibilities were:

- Refactored the app architecture from MVC to MVVM.
- Identifying and resolving bottlenecks, rectifying bugs, and enhancing application performance.
- Collaborating with cross-functional teams to define and design new features.

- STC Pay — [Published](#)
- STC Bank — [Published](#)
- Sehhaty — [Published](#)
- Anat — [Published](#)
- Lean Restaurant (Cashier & Waiter)
- Kuwaiti Restaurants
- Converted.In SDK — [Published](#)
- Pinoffer
- Pinoffer for merchants
- Offers tourism — [Published](#)
- Cairo Metro
- ManhajOnline
- FindEm
- Baby Phone for kids
- Quickchino

- Developed new features such as real-time chat and a booking system.

Technology for Humanity, Egypt – Android Developer

December 2016 – January 2018

Developing and maintaining FindEm app that introduces a database for missing people with an advanced search using face recognition technology.

- Built a database for missing people, displaying their data and pictures to the users to help recognize them.
- Develop an advanced search to recognize missing people by specific characteristics such as skin tone, eye color, hair color, height, and weight.
- Implemented Kairos SDK, which is based on computer vision algorithms that analyze faces, then returns a bunch of useful data about the faces.

Freelance – Junior Android Developer

September 2014 – December 2016

- Design and build advanced applications for the Android platform
- Collaborate with cross-functional teams to define, design, and ship new features.
- Work with outside data sources and APIs.
- Work on bug fixing and improving application performance.
- Continuously discover, evaluate, and implement new technologies to maximize development efficiency.

EDUCATION

Al-Azhar University – Bachelor's Degree of Commerce

October 2013 - June 2017

Final Year Grade	Very Good
Cumulative Grade	Good