Mostafa Mahmoud

Mobile application Developer

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🛱 Jan, 2000

Egypt, Cairo.

YouTube Channel

in LinkedIn

♥ <u>GitHub</u>

StackOverFlow

WhatsApp

About me

I am always eager to learn and grow my skills to stay up-to-date. With **over 3 years** of experience in mobile app development, I create apps that solve real problems for people.

I enjoy sharing ideas and working together to achieve team goals. Recently, I served as a team leader in a mentorship program, managing a team of three. My responsibilities included task distribution, code review, and explaining complex concepts during regular team meetings. This experience enhanced my leadership and communication skills.

My focus is on delivering real value to users and improving their experience. I believe in giving back to the developer community and sharing what I've learned. In my free time, I create YouTube videos and develop **open-source** tools to assist other developers. My YouTube channel has over **50,000 views** and almost **2,000 subscribers**.

I'm committed to continuous learning and growth, both for myself and those around me.

Work Experience

Flutter Developer

June 2023 - current (> 2 years)

Freelancer | Self employee

Flutter Developer

June 2025 - current (2 months)

Nigat | Freelancer

Was resposible for Developing Agaryoun real-estate app from scratch.

Flutter Developer

June 2023 - current (> 2 years)

Drasat tech | Freelancer & Full-time

- Developed a color system generation via a Python script, producing grayscales, tints, shades, and typographic palettes for consistent theming.
- Developed a CLI alias script for automatic feature scaffolding, boosting development productivity by over 30% and accelerating repetitive coding tasks.

Flutter Developer | KSA

Feb 2024 - March 2024 (2 months)

Amval Smart Co. | Full-time

Developed Amyal Service app, one of the key projects for Amyal Smart, a 100% Saudi investment company specializing in digital solutions, marketing, and loyalty programs.

In this position I was responsible for:

- Establishing the **core project structure** and developing the entire application.
- Agile methodologies, maintaining constant communication with the supervisor and regularly updating tasks on Trello.
- Developed a robust application structure that supports scalability and easy maintenance.

Flutter Developer

Aug 2022 - June 2023 (11 months)

Semicolon Co. | Full-time

- Solely responsible for App development.
- Successfully Maintained, and Developed over 10 projects.
- Proven **problem-solving** abilities to identify and resolve issues.
- Manage and distribute tasks and time under pressure situations.
- Dealing responsibly with **multiple daily tasks** of different projects, organizing, prioritizing, distributing, and following up on them in most cases til delivery to the client.

• **Collaborating closely** with back-end developers, communicating requirements and clarifying data specifications for new projects and issue resolution.

Projects

Al-Rahma Hospital Jan 2025

Al-Rahma Hospital mobile app is a multi-module Flutter application designed to elevate patient care and simplify the management of the hospital's corporate clients and their patients. It empowers users to book appointments, review medical records and test results, track vitals, and access telemedicine and emergency services.

- Took ownership at project kickoff by collaborating one-on-one with the manager to analyze requirements, made key UX decisions, and set the deadline; initiated a front-end-first strategy to leverage downtime—saving costs, accelerating timeline, simplifying backend handovers.
- · Managed architecture and workflow, and provided ongoing post-launch support.
- Designed the UI and built a high-fidelity Figma interactive **prototype**, and quickly mastered the tools.
- Parallel Frontend Development: created mock data to simulate backend behavior, and defined expected **API schemas** into a Postman collection during development; then gradually switched each completed module to live backend data with a **one-line code change**, which ensured a smooth handoff and **progressive data integration**.
- Acted as team lead by configuring a GitHub integration for immediate backend testing (avoiding deployment delays), performing QA on done features, participating in technical discussions, and building a Notion workflow to track tasks, log bugs, and monitor progress, which streamlined communication, reduced meeting time, and accelerated delivery.
- Designed and implemented a highly **customized payment solution** to address the lack of local credit gateways in Djibouti; coordinated closely with the backend developer to architect a flexible payment logic supporting wallet, cash, bank transfer, company insurance (partial/full), and receipt-based local payments; ensured minimal error risk for this critical feature.
- Implemented role-based access control solution, assigning tailored **permissions** to employees to access corporate accounts, billing, and patient data—seamlessly coordinated with backend services.
- Developed presentation logic that filters available doctors, schedules, and services based on working hours, holidays, and visit type, tailored for **low-tech users** to ensure a smooth and intuitive UX.

Google Play

Taxi Proche - Uber clone

Aug 2024 - Nov 2024

Taxi Proche is a ride-hailing app for Djibouti, built on a CodeCanyon Uber clone. After vetting and selecting the optimal codebase, I dove into its complex structure to deliver major edits, refactor and migrate code, fix native issues, resolve bugs, and implement new features with continuous testing to ensure stability and alignment with business needs.

- Evaluated and selected optimal codebase after thorough analysis of available ride-hailing solutions, choosing the most efficient option.
- Resolved critical Google Maps API overconsumption issue that caused excessive billing; collaborated directly with
 Google Cloud support team to address the problem, implemented API usage optimization, and established debug
 mode restrictions to reduce unnecessary costs for the client.
- **Secured** Google Maps APIs by separating API responsibilities, implementing protection practices, and establishing better usage monitoring to prevent overconsumption.
- Reduced server load by enhancing driver location updates; transitioned from MQTT to Firebase real-time connection through close backend collaboration.
- Enhanced ride request distribution system by collaborating with a backend developer to implement an automated cron job solution, eliminating manual driver rejection requirements and enabling automatic request forwarding to the next available driver, significantly improving system efficiency.
- Developed advanced trip management features, including estimated pricing, trip cancellation, estimated arrival time calculation based on distance and driver speed, and **VIP trip** functionality with no destination requirement.
- Implemented deep code refactoring to eliminate tight coupling, reduce unnecessary server requests, and maintain clean code practices.
- Designed and implemented a custom server-driven localization system and converted it into a package later.
- Improved **iOS** user experience by implementing back-swipe navigation and dismissible keyboard functionality when tapping outside input fields.

- Merging codebase updates to the current project codebase using proper **Git practices** while maintaining custom features and client-specific modifications.
- Maintained and uploaded the web version to the server environment.

Google Play - App Store - Website

Amyal Service - KSA

Car washing and parking services app in the Saudi Arabia with reservations and subscriptions implemented from scratch.

- Solely responsible for developing the project from scratch with different functions based on user role (user, employee, supervisor).
- Implementing a real-time update on the status of orders in the employee version, in addition to employee updates in the supervisor version based on FCM.
- Working with Agile, constantly following up on the work closely with the Team Leader, following up and adding tasks on Trello, and closely cooperating with the back-end developer.
- Implementing real-time pricing for products, discounts, and taxes, and dealing with payment cases in the application smoothly.
- Cleanly validate in-app dates and input fields, improving the UX.
- Implement code extensions to facilitate text styles in the application and facilitate the modification or later addition of dark mode.
- Implementing functions to facilitate the user experience such as simultaneously processing license plate data entry
 in both languages and performing validation as required, leading to successful application functionality and fewer
 bugs.

Google Play - App Store

Internet State Manager Package (Open Source)

2023

March 2024

Flutter **package** designed to manage internet connection outages seamlessly within the app; ensures an uninterrupted UX by implementing a reliable **data-fetching mechanism** that activates once the internet connection is restored. This package allows developers to easily handle network changes and customize user interfaces based on connectivity status with easy code.

Role: Creator and Maintainer

- Actual Internet Connection Check: Accurately detects the presence of an internet connection, beyond just verifying a Wi-Fi connection.
- Automatic Data Fetching: Implements your own function that **called once the internet connection is restored**. This feature provides an **excellent user experience** as the user does not have to reload/open the application again to fetch data when the internet connection is down.
- Builder Widget: Provides a dedicated builder widget with parameters to display various internet connection statuses, allowing control over the display of specific widgets based on the connection state.
- Customizable Widgets: Displays the package's built-in widget or a custom widget when the internet connection is down, with periodic status updates when the connection is restored.
- Ease of Use: Simplifies implementation by reducing the need for extensive code on every page that requires internet connection checks, making it practical and **user-friendly**.

Pub.dev - GitHub

Bul Ve Al Jan 2024

Classified ADs application in Turkey.

- I was responsible for developing the application from scratch in addition to designing the application interface design and improving the user experience.
- Implemented a **dynamic localization system** according to the client's request, fetching language data and translations from the server, and this system was **converted to a private package** to be **re-usable** in other projects.

It was a challenge, especially on the AD publishing page with multi-language, with the feature of automatically translating the rest of uncompleted content by handling with Google Translate services.

Google Play - App Store

SpaceX Feb 2024

Internship mobile app project for SpaceX APIs with some simple functions.

- Implemented Flutter Flavors for both android and iOS.
- Assigned the responsibility of being as a **team leader** for a team of two trainees where I was responsible for distributing tasks, reviewing the team codes, and explaining some technical matters to them such as Singleton, DI, BloC pattern, working with GitHub, and Clean architecture pattern.
- I was responsible for ui & ux design decisions of the project in collaboration with my team and assigning tasks accordingly.

GitHub

El-Garayhi Education

2023

Integrated into Mentor Academy for schools and educational centers. Enables students to participate in lessons, exercises, and timed exams. Provides answer corrections promptly upon completion of the exam. Allows comparison of student performance with peers who completed the same test.

- Complete the test solution, show images, and view the final result with evaluation even when the Internet connection is disconnected, and upload data as soon as the user connects to the Internet.
- Continuous client support for 6 months, dealing with tasks efficiently on Notion, and testing them before deploying
 with a direct cooperation with back-end developers which led to client appreciation for the work provided and
 prompt response.
- Unit testing implemented for the exam functionality to ensure code accuracy.

Google Play - App Store

Turkish House - KSA 2023

- Developed a "Branches" core feature for both user and waiter applications, tailoring it in each version to suit the app's functionality.
- Provided valuable client support in the final stages of the project, ensuring seamless implementation of requirements and timely resolution of issues. Coordinated with the back-end developer in assigning tasks to him.

App Store

Geo4physics Center

2023

- Devised an innovative solution to solve the problem of accessing videos securely within the app, in close collaboration with the back-end developer.
- · Achieved a reduction in the app's size and improved loading times and minimal device resouce consumption.

Not available on stores right now!

Wassally 2023

Restaurant App.

• Refactor chat functionality with multiple message types and cooperation with the back-end developer to fix some core issues.

Not available on stores right now!

Encrypt It

Personal application that encrypts and decrypts texts by password using unique and strong encryption algorithms.

- Developed a **special** encryption algorithm while still learning Flutter in the beginning.
- Devised a unique encryption approach that enhances security by **generating different**, **random ciphertext** each time the same text is encrypted, ensuring the utmost protection of the algorithm.
- Implemented a robust password-based encryption and decryption system.
- · Neumorphism UI design.

Google Play - GitHub

Technical Skills

Core

- Flutter & Dart

State Management & Arch

- BloC, Cubit & Provider
- Clean Architecture
- MVC Architecture

Back-end Integration

- REST API & Postman
- Firebase, FCM & APNs
- OneSignal
- HTTP, DIO & Retrofit

Code Quality

- Clean code
- SOLID Principles
- Unit testing

Certificates & Courses

- · Ultimate Design Patterns
 - <u>Udemy</u> M. Youssef (0% In Progress)
- Android native basics
 - YouTube (2023)
- Kotlin
 - Udemy (2023)
- UX Design
 - Edraak (2023)
- Flutter Clean Architecture
 - Udemy Usama Elgendy (2023)
 - Udemy Tharwat Samy (In Progress 50%)
- UI Design
 - Udemy (2023)
 - YouTube (2021)
- CS50
 - YouTube A. Gamal (80%)

Additional Skills

- Git, GitHub & GitLab
- Data Structure
- Algorithms & Problem-Solving
- Design Patterns
- UI & UX Principles
- Google Maps
- Mono-repo architecture
- Al Vibe coding (Windsurf, Trea & Cursor)
- Al Prompt engineering

App Store Deployment

- Google Play console
- App Store & TestFlight
- Huawei Store

- · Git & GitHub
 - YouTube Elzero (2022)
 - YouTube BigData (2024)
- Flutter
 - Udemy A. Mansour (2022)
 - Udemy H. Fulaih (2022)
- Dart
 - YouTube (2019)
 - Udemy H. Fulaih (2022)
- · Java & OOP
 - YouTube Abdullah Eid (2019)
- Design Principles
 - YouTube (2019)
 - YouTube (2020)

Soft Skills

- Analytical thinking
- Quick learning
- Skillful Searching
- Attention to detail
- Communications
- Self teachable
- Ability to share knowledge

- Critical thinking
- Design Principles
- Debugging skills
- Dive into a Code & Modification
- Notion & Trello
- Time management

LinkedIn Recommendations

Mohamed Elshafiy

Founder & CEO at Semicolon Managed me at Semicolon Aug 2023 Mostafa proved to be a **responsible** and diligent application developer, a quality I consider paramount above all other skills. He is **smart** and adept at **problem-solving**, swiftly employing **logical thinking skills**.

In summary, Mostafa's tenure at Semicolon was marked by his proficiency as a responsible application developer and his acumen in tackling challenges. These attributes not only distinguished him but also **enhanced the overall success of our endeavors**.