

Emad Hussien

Backend Engineer More than a year of hands-on software development experience focusing on backend technologies and full-stack applications. Built and delivered various projects, including side projects, freelance work, and internships. I enjoy turning ideas into reality.

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WORK EXPERIENCE

Klivvr

Egypt, Cairo

Backend Intern

AUG 2024 - OCT 2024

Klivvr is a fintech Egyptian company subsidiary of Orascom Financial Holding (OFH).

- Designed and implemented MongoDB aggregation pipelines to optimize filtering and pagination, reducing backend workload.
- Reduced API complexity and traffic by creating a flexible PATCH API for batch updates.
- Integrated Firebase Storage for file uploads with Multer and validation middleware.
- Implemented real-time backend features for task updates and user activity tracking using Socket. IO.

Technologies: Node.js, TypeScript, Express, MongoDB, Firebase, Socket. IO.

Freelance

Egypt, Cairo

Web Developer

JAN 2024 - MAR 2024

- Enhanced system stability and performance by resolving legacy front-end code issues.
- Improved security and streamlined user experience by integrating Google login via Firebase SDK.
- Built a payment gateway integration with Paymob for seamless online transactions.

Technologies: JavaScript, React.js, Redux, Firebase, Tailwind CSS, MaterialUI.

EDUCATION

Ain Shams University, (Bachelor of Computer and Information Sciences).

Egypt, Cairo

June 2023

TECHNOLOGIES

Stack

Java, Spring Boot, H2 Database, JPA, REST API, MySQL, Mockito, Spring Security, Spring Cache, AOP, SpringBootTest, Hibernate, Maven, Keycloak, object-oriented design.

Other

NodeJS, ExpressJS, TypeScript, ReactJS, MongoDB, Firebase, Redux, Github, Tailwind, Material Ui, Socket IO

CERTIFICATES

[Relational Databases With SQL](#)

[NoSQL Databases Using MongoDB](#)

[CS50: Introduction to Computer Science \(2020\)](#)

[Responsive Web Design \(2022\)](#)

LANGUAGES

Arabic native

English C1, fluent

PROJECTS

Library Management System (Nov 2024 - Present). Backend Engineer.

- Developed RESTful APIs to manage books, patrons, and borrowing records with JWT-based authentication and transaction management.
- Designed database schemas to handle borrowing limits and track available copies, ensuring robust error handling.
- Integrated AOP for cross-cutting concerns and implemented caching to enhance performance.

Technologies: Java, Spring Boot, JPA, Hibernate, RESTful APIs, Spring Security, AOP, Spring Cache, H2, Mockito.

Workout Tracker (SEP 2024 - OCT 2024). Backend Engineer.

- Designed relational database schemas for user authentication, exercises, and workout plans to ensure consistency and scalability.
- Developed seeding logic for exercise data categorized by type and muscle group.
- Secured APIs using JWT authentication, enabling user-specific operations and generating progress reports.

Technologies: Java, Spring Boot, MySQL, JPA, Hibernate, RESTful APIs, JWT.

Food Delivery System (JUL 2024 - AUG 2024). Backend Engineer.

- Designed scalable APIs for restaurant management, order processing, and customer reviews.
- Integrated secure payment processing using Stripe and authentication via Keycloak.
- Ensured system reliability with validation, exception handling, and unit testing.

Technologies: Java, Spring Boot, MySQL, Stripe, Keycloak, Mockito.

E-commerce application (AUG 2023 - JAN 2023). Backend Engineer.

- Developed CRUD operations on the server side using the Express framework followed by MVC architecture.
- Implemented secure authentication and authorization mechanisms using JWT, including the use of refresh tokens for enhanced security.
- Utilized MongoDB as the database with Mongoose schema for data modeling.
- Integrated Stripe API for payment processing, both on the backend and frontend.

Technologies: Node.js, Express.js, MongoDB, Stripe, JWT.