Salma Ahmed Attia

Back-End Developer

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PROFILE

Back-End Developer | Fresh Graduate

A motivated Back-End Developer with a solid foundation in Node.js, Express, MongoDB, and RESTful APIs. Recently graduated with hands-on experience in building scalable and efficient server-side applications. Eager to apply my skills in a dynamic, growth-oriented environment, contributing to robust software solutions.

PROFESSIONAL EXPERIENCE

Contestant 2021 - 2022Alexandria, Egypt

Egyptian Collegiate Programming Contest (ECPC)

• Used problem-solving skills and c++ language to solve problems in the Egyptian Collegiate Programming Contest.

Required high team-work skills and working under stress

Back-end Developer Trainee

Manara (remote)

07/2024 - present Cairo, Egypt

- Gained hands-on experience in backend development using Node.js.
- Implemented database schemas and optimized queries for performance.
- Collaborated with mentors and team members to solve real-world problems and enhance backend functionality.

Software Engineer Trainee

Orange Digital Center (hybrid)

11/2024 - 01/2025Cairo, Egypt

- Explored advanced concepts in Software Engineering, including SDLC, Agile Development, and CI/CD Pipelines.
- Gained expertise in Software Development Frameworks and Object-Oriented Programming (OOP).
- Acquired practical experience with Git, debugging techniques, and software testing.

Back-end Developer 02/2025 - present Runsoft (on-site) Cairo, Egypt

- Developed and maintained backend services using PHP Laravel, ensuring secure and scalable APIs.
- Designed and optimized database schemas, queries, and migrations for MySQL.
- Wrote clean, well-documented, and testable code following modern software development best practices.
- Participated in code reviews and agile development processes, improving overall team productivity.

EDUCATION

Bachelor of Computers Science and AI - Computer Science Department

Matrouh University

2020 - 2024Matrouh, Egypt

Faculty of Computers and Artificial Intelligence

Grade: 3.3

PROJECTS

Graduation project: Object car following system

(utilizing an ESP32-CAM, ultrasonic sensors, infrared technology, and Arduino for algorithm implementation.)

1- Sensor Module:

- Utilized ultrasonic and infrared sensors for precise distance measurement and object detection.
- 2- Bluetooth Module:
- Established seamless communication between leader and follower vehicles using HC-05 Bluetooth modules.

• Integrated with an MIT App Inventor application for real-time control and synchronization of vehicle movements.

3- Camera Module:

• Employed an ESP32-CAM for computer vision to enhance object recognition and tracking.

Advanced User Management and Real-Time API System &

- User Authentication: Login, registration, and protected routes with role-based access control.
- API Documentation: Postman collection setup for streamlined API testing and collaboration.
- File Uploads: Integrated file upload functionality using Multer.
- Real-Time Communication: Implemented real-time updates using WebSockets and Socket.IO.
- Pagination & CORS: Efficient data retrieval with pagination and cross-origin resource sharing support.
- Error Handling: Centralized error handling following the jSend specification for consistent API responses.
- Environment Configuration: Used dotenv for secure environment variable management.
- Database: Integrated MongoDB for data storage and management.

Project Management Task &

- **User Authentication:** Secure login, registration, and role-based access control with protected routes.
- API Documentation: Streamlined API testing and collaboration using Postman collection.
- File Uploads: Integrated file upload functionality with Multer.
- Real-Time Communication: Real-time updates implemented using WebSockets and Socket.IO.
- Pagination & CORS: Efficient data retrieval with pagination and cross-origin resource sharing support.
- Error Handling: Centralized error handling with jSend specification for consistent API responses.
- **Environment Configuration:** Secure environment variable management with dotenv.
- Database: MongoDB integration for robust data storage and management.

Finance Tracking System

Full-Stack Project | React, Node.js, Express, MongoDB, JWT, Mongoose

- Built a secure, user-focused finance tracking app using **Node.js**, **Express**, **MongoDB**, and **JWT**.
- Developed **RESTful APIs** for income and expense management with real-time balance calculations.
- Designed **Mongoose data models** and implemented user-specific dashboards with data isolation.
- Integrated **authentication middleware**, conducted API testing with **Postman**, and used **Git** for version control.
- Developed core features including **income/expense addition and deletion**, **real-time balance calculations**, and **transaction history** views.

SKILLS

Technical Skills:

Languages & Frameworks: JavaScript (ES6+), TypeScript, Python, Node.js, Express.js, HTML, CSS.

Databases & APIs: MongoDB, PostgreSQL, MySQL, RESTful APIs, WebSockets, JWT.

 $\textbf{DevOps \& Tools:} \ \mathsf{Docker}, \ \mathsf{CI/CD} \ \mathsf{pipelines}, \ \mathsf{Git},$

GitHub, Postman.

Software Practices: OOP, MVC architecture, Caching, Pagination, Input Validation, Error Handling.

Additional Skills: Agile Development, Testing, Debugging, SDLC, Design Patterns.

Soft Skills:

Problem solving | Communication skills | Presentation skills | Critical Thinking | Team work

LANGUAGES

Arabic $\bullet \bullet \bullet \bullet \bullet$ English $\bullet \bullet \bullet \bullet \bullet$