


Hassan Sherif Mikawi

+201023667216 | hassansherif122202@gmail.com | LinkedIn | GitHub |  Portfolio

EDUCATION

Arab Academy for Science, Technology and Maritime Transport (AAST)

B.Sc. in Electrical and Computer Engineering; GPA: 3.3/4.00

Cairo, Egypt

Oct 2020 – July 2025

ALX Software Engineering

Comprehensive full stack development course

Cairo, Egypt

Apr 2023 – May 2024

EXPERIENCE

Co-founder and CTO at YBM

Startup

Oversaw the technical direction, managed website development, and various digital projects.

Sep 2022 – Jan 2024

- Directed the strategic planning and execution of technology solutions, ensuring alignment with business goals and driving innovation in product development.
- Led the development team in designing and deploying a scalable website architecture, incorporating modern web technologies to enhance user experience and operational efficiency.
- Managed key projects from concept to deployment, focusing on optimizing performance and integrating advanced digital tools to stay ahead in competitive markets.

Intern at Arab Organization for Industrialization (AOI)

Contributed to the manufacturing line for hardware components.

Jun 2023 – July 2023

- Assisted in the optimization of the hardware assembly line, implementing lean manufacturing principles to increase efficiency and reduce waste.
- Collaborated with engineering teams to refine design specifications and ensure compliance with industry standards.

PROJECTS

Flex Programming Language | Python, JavaScript, React, VS Code Extension API

Jan 2023 – Apr 2024

- Designed and implemented an innovative programming language that seamlessly blends multiple syntax styles (English, Arabic transliteration, and C-style) to accommodate diverse programming preferences
- Developed a robust interpreter with lexical analyzer, recursive descent parser, and comprehensive error handling including AI-assisted debugging
- Created a feature-rich online IDE with real-time input handling and code execution capabilities
- Built two VSCode extensions: one for language support and another with an integrated chatbot to facilitate learning for students
- Implemented cross-platform compatibility with executable builds for Windows, macOS, and Linux
- Designed a smart import system supporting modular code organization and library management

Advanced Home Server Setup (for Personal Use) | Docker, Homarr, Plex, Nginx, VPN

Feb 2024

- Engineered an extensive home lab setup using Docker to deploy and manage a wide array of services such as media servers (Plex, Jellyfin), download clients (**Transmission**), and content managers (**Radarr**, **Sonarr**, **Prowlarr**)
- Employed Tautulli and Kasm for detailed monitoring and secure, isolated browsing environments respectively, optimizing both user experience and operational security.
- Set up Mealie for meal planning and Teslamate for data monitoring, demonstrating versatility in server utility beyond traditional media and file storage roles.
- Reinforced network security with VPN integrations, safeguarding all data transmissions especially in privacy-sensitive applications like torrenting and external media access.

Hyper Market Management System | Java, MySQL, NetBeans, jBCrypt, FlatLaf

Jun 2023

- Revolutionized market management with a comprehensive system for sales, purchases, and employee roles.
- Implemented administrative, marketing, inventory management, sales, and user modules.
- Used Java for backend development, NetBeans for GUI, and MySQL for the database.
- Enhanced security with password management using jBCrypt and improved design using FlatLaf.
- Packaged for easy installation using jpackage with an executable installer available in the releases.

Simple Shell | C, Unix System Calls, GCC, Betty Coding Style

Dec 2023

- Developed a UNIX command line interpreter as a group project, emulating basic shell functionalities.
- Implemented functionalities including command execution, environment manipulation, and custom input handling
- Incorporated system-level programming with Unix system calls like fork, execve, and waitpid to manage processes.
- Utilized C for core development with strict adherence to the Betty coding style for clean and maintainable code.

SKILLS

Languages: C/C++, C#, Java, Python, JavaScript, Bash, SQL, Flutter

Operating Systems: Windows, linux, MacOS

Developer Tools: Git, SSH, Linux, VS Code, Visual Studio, Docker, Servers{linux , macos , windows Servers}

Methodologies: Agile, Scrum, OOP, Functional Programming, DevOps, CI/CD, TDD

EXTRACURRICULAR ACTIVITIES

ASI - AI Club (Head of Learning)

(AAST) Jan 2024

Responsible for designing and implementing the curriculum and organizing AI-focused tournaments.