BONIFACE MUNGA

Mombasa, Kenya | +254 745 250 003
https://github.com/MungaSoftwiz | mwachilumobm@gmail.com/ | LinkedIn

SKILLS

Languages: C, Go, Python, SQL, HTML, CSS.
Technologies: Flask, Git, GitHub, GitHub Actions, Trello, Vim, Visual Studio Code, Linux, Puppet, Nginx, MySQL.

EXPERIENCE

Open Source Contributions - OCaml API Watch Project (Outreachy)   March 2024 - April 2024

- Designed initial test cases in a test-driven development style to represent various API changes. This approach ensured immediate detection of errors, resulting in 50% reduction in issues post pushing and enhancing overall tool stability.
- Identified and resolved critical bugs in library functionalities, ensuring accurate detection and handling of API changes. This effort improved the library's performance and reliability by 35%.
- Executed a version upgrade to OCaml 4.14, updating the dune project and opam(dependency management tool) file to match new version requirements, ensuring seamless transition with no breaking changes to compiler libraries.
- Upgraded the project's code formatting tool to ocaml format.0.26.1, enhancing code readability and maintainability by aligning with the latest formatting standards.
- Developed a tool that reads two .cmi files and generates a diff of the interfaces. This tool will significantly enhance usability for OCaml developers, reducing interface comparison time by 60% and improving developer productivity.
- Engaged in detailed code reviews with fellow contributors to ensure code quality and adherence to project standards. This collaboration improved code quality by 30% and fostered a culture of continuous improvement.

Projects
AirBnb_Clone_V3: Collaborated with a peer to extend a project by integrating RESTful APIs.This enhancement facilitated a seamless interaction with the database, improving data retrieval and manipulation efficiency by 40%.

EcoSortify: Developed a Flask web application connecting environmentalists to share ideas and act for a greener tomorrow. Implementing user authentication and a robust back-end infrastructure, enhancing security and user experience.

Simple Shell: Developed a custom UNIX shell in C as part of a team, implementing features such as command parsing, execution, and error handling.

Organization authenticator api(Ongoing): Developed an API for user authentication and organization management.

EDUCATION

ALX Africa Software Engineering   January 2023 - present
Coursework: OOP in Python, Data Structures & Algorithms, Operating systems, Compilers,Database Management, Server Management.