



Marouane Addou

Software Developer — Full Stack Developer

✉ marouaneaddou@hotmail.com ☎ 0696782838

🌐 marouaneaddou in marouane-addou ↻ maddou 📺 marwanaddou123

ABOUT ME

I am passionate about backend development and have a strong interest in understanding how things work at a deeper level. I enjoy working with modern technologies and exploring C/C++ for system-level programming. Solving coding challenges helps me enhance my problem-solving skills and grow as a developer.

PROGRAMMING SKILLS

- **Languages:** C, C++ 98, Python, Javascript
- **Web Dev:** HTML, CSS, Django, Django Rest API
- **Tools:** Git, Docker, Linux(Basic), Postman

PROJECTS

- **Multiplayer Game Website** Role: Full Stack Developer — Technologies: Django, WebSockets, REST API, Redis, Vanilla JavaScript
 - Developed the server-side functionality for a real-time multiplayer Pong game using Django.
 - Used WebSockets for real-time communication between players during the game.
 - Managed game sessions with Redis for fast session storage and retrieval.
 - Created a REST API for managing game-related actions, such as starting a game and tracking scores during the session.
 - Worked with the team to ensure smooth gameplay and efficient communication between the server and client.
 - Implemented the client-side game logic and interactions using Vanilla JavaScript to manage game UI, player actions, and server communication.
- **Web Server Project (C++98)** Role: Backend Developer — Technologies Used: C++98, HTTP, Non-blocking Multiplexing, CGI
 - Built a custom web server from scratch using C++98 to handle GET, POST, DELETE requests and serve dynamic pages via CGI.
 - Implemented non-blocking multiplexing to efficiently manage multiple client connections without multi-threading.
 - Designed and parsed HTTP GET, POST, and DELETE requests to serve static and dynamic content.
 - Worked with CGI for dynamic content generation using a specific programming language based on user input.
 - Managed error page handling to ensure proper error messages were displayed for incorrect requests.
 - Collaborated closely with the team to improve server performance and functionality.
- **Inception Project (Docker Containers)** Role: System Administrator — Technologies Used: Docker, Docker Compose, Networking, Containerization
 - Created Docker containers from scratch, setting up necessary configurations and dependencies for each container.
 - Used Docker Compose to manage and orchestrate multiple containers running different services, such as a web server, database, and more.
 - Defined container configurations, ensuring proper networking between them and enabling communication across services.
 - Managed volumes for persistent data storage and set environment variables to ensure smooth integration between containers.
 - Ensured the application environment could be started or stopped quickly with a single command, streamlining the deployment process.
- **MiniShell Project (Shell Development)** Role: Developer — Technologies Used: C, Unix/Linux, System Calls, File Descriptors, Process Management
 - Developed a simple shell program that mimics basic functionality of Bash.
 - Implemented custom commands, handling process creation, input/output redirection, piping, and signal handling.
 - Managed file descriptors and processes to execute commands in a Linux/Unix environment.
 - Implemented robust error handling to manage system call failures and unexpected input scenarios.

EDUCATION

- **1337 Coding School** Tetouan, Morocco
Architect of Digital Technologies 2022 - 2025
- **OFPPT - Electromechanics of Automated Systems** Oujda, Morocco
Specialized Technician Diploma 2019 - 2021
- **Baccalauréat in Physical Sciences** Jerada, Morocco
High School Diploma 2019