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Software Engineer

Yaba, Lagos

I am a professional, versatile, and passionate programmer in my daily life. I am a quick learner and have a self-learning attitude. I enjoy learning and exploring new technologies and am passionate about problem-solving. I love almost all the stacks of software engineering. My current stack includes Java, Python, Spring Boot, React, JavaScript, MongoDB, PostgreSQL, MySQL, Go etc.

WORKING EXPERIENCE

Software Engineer Intern - *Semicolon Lab Private Ltd.*

November 2024 - February 2025

As a full-time software engineer intern at Semicolon Lab Private Ltd. I am responsible for converting ideas to products using modern technology and collaborating with the dynamic team.

- ❖ Developing and maintaining robust applications solutions using a diverse tech stack including Java, Python, React, Redux, MySQL, MongoDB, OpenAI API, Docker, etc.
- ❖ Working closely with the team to ensure seamless integration of software and meet project objectives.
- ❖ Consistently met and exceeded project deadlines, ensuring that high-quality deliverables were produced to the satisfaction of our clients.
- ❖ Adapted to evolving technologies and best practices, staying at the forefront of the industry to drive innovation.
- ❖ Collaborating with the front-end and QA teams to ensure that the project objectives are integrated seamlessly.

Throughout my internship journey at Semicolon Lab Private Ltd, I have worked in Java, Python, Spring Boot, React, Redux, MySQL, MongoDB, Redis, Prisma, OpenAI API, Docker, TailwindCSS, etc.

TECHNICAL SKILLS

- ★ **Back-End:** Java, Spring Boot, Python, Django, Flask, Javascript, Go, Solidity, Rust and Move.
- ★ **Database:** MongoDB, MySQL, PostgreSQL, Redis, Mongoose, and TypeORM.
- ★ **Front-End:** React, Redux, And Tailwind CSS, .
- ★ **Tools:** Postman, Figma, VS Code, Open AI, Github, Gitlab, Slack, etc.

SOFT SKILLS

I prioritize communication, teamwork, creativity, empathy, accountability, patience, confidence, collaboration, and time management.

PROJECTS

BlockEdu App

BlockEdu is a secure solution designed to streamline the verification of academic and professional credentials using blockchain technology. Institutions upload verified credentials to the blockchain, enabling students to share tamper-proof proof of their qualifications with employers, embassies, or other stakeholders via a unique URL or QR code.

- ❖ **Institutional Credential Upload and Management:** Built a robust backend using java and SpringBoot to handle credentials uploads, storage, and retrieval. Integrated PostgreSQL for relational data management, storing institutional profiles, student records, and metadata securely. Used Sui Walrus Storage to efficiently manage large credential files (e.g., PDFs, images) while maintaining scalability and performance.
- ❖ **Blockchain Integration for Immutable Records:** Leveraged **Sui Blockchain** and its native Move programming language to create smart contracts that store credential metadata immutably on-chain. Each credential is assigned a unique identifier (UID), ensuring traceability and authenticity. Designed the platform to utilize Sui's high-speed transaction capabilities and parallel execution engine for cost-effective and scalable operations.
- ❖ **Secure Authentication and Email Notifications:** Implemented secure authentication protocols using Gmail Passkey and OAuth2, allowing institutions and students to log in securely. Integrated Java mail to send automated email notifications to students when their credentials are uploaded, along with instructions to access the platform and generate verification URLs or QR codes.
- ❖ **QR Code and URL Generation for Verification:** Developed a feature that allows students to generate tamper-proof QR codes and URLs linked to their credentials stored on the blockchain. Employed libraries like React QR Code Generator to create dynamic QR codes that can be scanned by employers, embassies, or other stakeholders for instant verification of the credential's authenticity.

Tools Used: Move, Java, SpringBoot, PostgreSQL, Sui BlockChain and, Sui Walrus Storage.

MINT EASY App

The Mint Easy is a decentralized application (dApp) designed to empower creators and collectors by enabling seamless creation, and management of non-fungible tokens (NFTs). I led the development of this project, ensuring an intuitive user experience, robust security, and scalability leveraging Sui's high-performance blockchain infrastructure.

- ❖ **Designed and Implemented an Intuitive Frontend:** Built an engaging and responsive user interface using React, allowing users to easily mint, buy, sell, and explore NFTs. Leveraged Tailwind CSS and MUI for modern styling and ensured smooth navigation across the platform.
- ❖ **Integrated Wallet Authentication and User Management:** Enabled secure wallet-based authentication using Sui Zklogin and integrated wallet providers like Sui Wallet to allow users to connect their wallets seamlessly. Implemented session management to track user activity and preferences across sessions.
- ❖ **Developed Smart Contracts for NFT Functionality:** Utilized Move, Sui's native programming language, to develop smart contracts for core functionalities such as NFT minting, transferring ownership, and managing royalties. Ensured compliance with Sui's object-centric model for efficient and scalable transactions.

Tools Used: Move, React, Tailwind Css, Sui ZkLogin, Sui BlockChain and Sui Wallet Integration.

Symptom Checker App

The Symptom Checker App helps users identify potential conditions based on symptoms. Built with Flutter, its backend—developed by me using Java and Spring Boot—features APIs for real-time symptom analysis and diagnostic insights.

- ❖ Developed a suite of RESTful APIs using Java and Spring Boot to handle user symptom data, perform analytics, and return diagnostic recommendations..
- ❖ Integrated the backend with MongoDB using Spring Data to ensure efficient storage and retrieval of user data and symptom records.
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Tools Used: Java, Spring Boot, and MongoDB.

CARELINK – under construction

CareLink is an AI-powered healthcare app for medical inquiries, appointment scheduling, and health tracking. Built with Flutter, its backend developed by me using Java and Spring Boot features robust APIs that integrate third-party services for seamless frontend and backend communication.

- ❖ Developed RESTful APIs using Java and Spring Boot that efficiently communicate with MongoDB via Spring Data.
- ❖ Implemented secure authentication mechanisms by integrating OTP-based verification via AWS SES, as well as Google and Facebook OAuth..
- ❖ Ensured robust API validation by leveraging Spring Boot's validation framework (Hibernate Validator).

- ❖ Engineered a feature that calculates and generates comprehensive PDF health reports.

Tools Used: Java, Spring Boot, MongoDB..