MUHAMMED SINAN

MERN Stack Developer

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🌐 Portfolio | </> LeetCode

ABOUT ME

Results-oriented MERN Stack Developer with practical expertise in designing, building, and deploying scalable web applications. Skilled in crafting robust, secure, and user-centric solutions leveraging MongoDB, Express.js, React.js, and Node.js. Committed to optimizing performance, maintaining clean architecture, and integrating emerging technologies to drive impactful results.

SKILLS

- **Languages:** JavaScript, TypeScript, SQL, HTML, CSS
- **Frameworks:** Node.js, Express.js, Nest.js, Next.js, TailwindCSS
- **Database:** MongoDB, PostgreSQL
- **Libraries:** React.js, Socket.io, WebRTC, Redux, React-query, Three.js, Framer Motion, Axios, JWT, GoogleAI, OpenAI, OAuth 2.0, Nuqs
- **Platforms:** AWS, GitHub, Render, Vercel, Firebase, Cloudinary
- **Tools:** Docker, Git, GitHub Actions, CI/CD, Winston, ESLint, NPM
- **Concepts:** Clean Architecture, MVC Architecture, SOLID Principles, Agile Methodologies
- **Others:** Self-driven, Leadership, Multitasking

PROJECTS

• AVM Ayurvedic: Hospital Management Platform

Next.js, Node.js, Express.js, MongoDB, WebRTC, AWS   Live | GitHub | Demo

- Engineered an **AI-powered hospital management platform** for Ayurvedic consultations, integrating secure video calls, booking, and payment systems.
- Enhanced frontend with **Next.js** and **TailwindCSS**, achieving 90+ scores in **Google Lighthouse** for SEO, performance, and accessibility.
- Enabled real-time video consultations using **WebRTC** and SimplePeer, improving user engagement.
- Designed a secure backend architecture using **Node.js**, **Express.js**, and **MongoDB**, adhering to **Clean Architecture** principles.
- Deployed the platform on **AWS** and **Vercel**, implementing CI/CD pipelines via **GitHub Actions**.
- Integrated **role-based access control (RBAC)** to manage user authentication and permissions.
- Tech Stack: **Next.js**, TypeScript, WebRTC, TailwindCSS, Node.js, Express.js, MongoDB, Stripe, JWT, OAuth 2.0, AWS.

• Trends: E-commerce Platform

Node.js, Express.js, MongoDB, Razorpay, EJS   Live | GitHub | Demo

- Delivered an **e-commerce platform** with robust authentication, wallet management, and dynamic discount systems.
- Streamlined payment integrations using **Razorpay** with order tracking and coupon management.
- Built an **admin panel** for product, category, and order management, incorporating sales analytics and PDF invoice generation.
- Enhanced customer support with real-time communication via **WebSockets**.
- Tech Stack: **Node.js**, Express.js, MongoDB, EJS, Razorpay, PDFKit, JWT.

• Readify: Article Management Platform

Next.js 15, React 19, MongoDB, Cloudinary   Live | GitHub

- Built a **content discovery platform** enabling users to discover, post, and engage with articles anonymously.
- Incorporated **Cloudinary** for seamless image handling and optimized performance with **Next.js 15** and **TailwindCSS**.
- Leveraged **Nuqs state management** for efficient pagination and improved user interaction.
- Secured platform access via **JWT**, ensuring data protection and privacy.
- Tech Stack: **Next.js**, TypeScript, Cloudinary, MongoDB, JWT, React Hook Form.

• Sahithyolsav Manager: Event Management Tool

React, Redux, Express.js, MongoDB   Live | GitHub | Demo

- Designed an **event management tool** supporting participant/team registration and performance tracking.
- Enhanced performance by reducing API calls by 80% through efficient state management.
- Applied **lazy loading** and **code splitting** to improve load times.
- Tech Stack: **React**, Redux, Node.js, Express.js, MongoDB, JWT.

OPEN SOURCE CONTRIBUTIONS

- **Strapi: Security Improvements**
Headless CMS Platform Website | GitHub
  - Developed a critical **security enhancement** to strengthen compliance with modern security standards.
  - Submitted a **pull request** under review, addressing security vulnerabilities in the authentication mechanism.

- **Impler.io: Authentication Enhancements**
Data Importation Platform Website | GitHub
  - Identified and resolved **2 critical vulnerabilities** in password hashing, improving platform security.
  - Submitted and merged **2 pull requests**, implementing stronger password validation and optimized hashing algorithms.

- **Origin UI: Component Development**
Open-Source UI Library Website | GitHub
  - Contributed **2 new UI components**, enhancing the library's usability and accessibility for developers.
  - Designed and implemented **custom button components**, broadening the component library offerings.

EDUCATION

- **Brototype** *2023 - Present*
MERN Stack Development Kozhikode, Kerala
- **SNGHSS, chelannur** *2021 - 2023*
Higher Secondary (Science) Kozhikode, Kerala