MUHAMMED SINAN

MERN Stack Developer

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LeetCode | ⊕ Portfolio

ABOUT ME

Self-taught MERN Stack Developer with hands-on experience in building and deploying scalable, high-performance web applications using MongoDB, Express.js, React.js, and Node.js. Strong proficiency in front-end and back-end development, with a focus on creating efficient, secure, and user-friendly solutions. Passionate about continuous learning and applying new technologies to solve real-world problems, with a commitment to writing clean, maintainable code.

SKILLS

- Languages: JavaScript, TypeScript, SQL, HTML, CSS
- Frameworks: Node.JS, ExpressJS, NestJS, NextJS, TailwindCSS
- Database: MongoDB, PostgreSQL
- Libraries: ReactJS, Socket.io, WebRTC, Redux, React-query, ThreeJS, Framer motion, Axios, JWT, GoogleAi, OpenAi, OAuth 2.0, Nuqs
- Platforms: AWS, Github, Render, Vercel, Firebase, Cloudinary
- Tools: Git, GitHub Actions, CI/CD, Windston, Eslint, Npm
- Concepts: Clean Architecture, MVC Architecture, SOLID Principles, Agile Methodologies
- Others: Self-learning, Leadership, Multi Tasking

PROJECTS

• AVM Ayurvedic: Hospital Management Platform

Next.js, Node.js, Express.js, MongoDB, WebRTC, AWS

Live | GitHub | Demo

- Developed an AI-powered hospital management platform for Ayurvedic consultations, featuring secure video calls, booking, and payments
- Optimized frontend with Next.js and TailwindCSS, scoring 90+ in Google Lighthouse for SEO, performance, and accessibility
- Implemented real-time video consultations using WebRTC and SimplePeer, enhancing user experience
- Architected a scalable, secure backend with Node.js, Express.js, and MongoDB, following Clean Architecture
 principles
- Deployed the platform on **AWS** and **Vercel** using CI/CD pipelines via **GitHub Actions**, enabling automated deployments
- Implemented role-based access control (RBAC) for secure user authentication and permissions
- Frontend: Next.js, TypeScript, WebRTC, TailwindCSS, ReactQuery, Radix UI, Framer Motion, Zod
- Backend: Node.js, Express.js, MongoDB, AWS, WebRTC, Socket.io, OAuth 2.0, JWT, Stripe, Joi
- DevOps: Vercel, GitHub Actions, ESLint, Prettier, Postman, Winston, Clean Architecture

Trends: E-commerce Platform

Node.js, Express.js, MongoDB, Razorpay, EJS

Live | GitHub | Demo

- Created an **e-commerce platform** with secure authentication, wallet management, and dynamic offers, supporting cart and wishlist functionality
- Integrated Razorpay for multiple payment methods, along with order tracking and coupon management features
- Built an **admin panel** for managing products, categories, and orders, including sales reporting and invoice generation using **PDFKit**
- Implemented real-time customer support using WebSockets for efficient communication
- Tech Stack: Node.js, Express.js, MongoDB, EJS, Razorpay, PDFKit, JWT, Moment.js

Readify: Article Management Platform

Next.js 15, React 19, MongoDB, Cloudinary

Live | GitHub

- Developed a content discovery platform that allows users to discover, read, and manage articles effortlessly
- Integrated Cloudinary for efficient image handling, enabling easy image uploads and management
- Achieved optimized performance and accessibility with Next.js 15 and TailwindCSS, ensuring a responsive UI with light/dark theme switching
- Implemented Nuqs state management for efficient pagination and smooth user experience
- Secured platform access using JWT authentication, ensuring user privacy and data protection

- Features: Anonymous posting, personalized feed, debounced search, like & share options
- · Tech Stack: Next.js, TypeScript, Cloudinary, MongoDB, JWT, React Hook Form, Zod, React Query

Sahithyolsav Manager: Event Management Tool

React, Redux, Express.js, MongoDB

Live | GitHub | Demo

- Delivered an event management tool for SSF Kerala, supporting participant/team registration, mark lists, and overall team marks in 3 days
- Increased performance by 70% using memoization and reduced API calls by 80% with efficient state management
- Enhanced load times with lazy loading and code splitting, ensuring better user experience
- Implemented JWT authentication to secure the application and protect sensitive data
- Tech Stack: React, Redux, Node.js, Express.js, MongoDB, JWT

URL-shortener

NestJS, MongoDB, React

Live | GitHub | Demo

- Developed a URL shortener with user authentication, click tracking, and a personalized dashboard for managing shortened URLs
- Gained expertise in **NestJS** by applying modular architecture and **dependency injection**, with **JWT** for secure authentication
- Tech Stack: NestJS, MongoDB, React, JWT

Ace-Quiz: Quiz Application

Next.js, MongoDB, Redux, Express.js, Node.js

Live | GitHub | Demo

- Built a scalable quiz application with Next.js and Clean Architecture, ensuring maintainability and modular design
- Implemented Redux Toolkit for efficient state management and Radix UI for accessible component design
- · Automated testing and deployment with GitHub Actions, improving development workflow
- Tech Stack: Next.js, MongoDB, Redux, Node.js, Express.js, GitHub Actions

OLX & Netflix Clones

React, Firebase, TMDb API

GitHub (OLX) | GitHub (Netflix)

- Developed fully responsive OLX and Netflix clones with React, integrating Firebase for authentication and data storage
- Integrated **TMDb API** for real-time movie data in the Netflix clone and built secure image upload functionality in the OLX clone
- Managed application state using Context API, ensuring efficient data flow and performance
- Tech Stack: React, Firebase, TMDb API, Context API

OPEN SOURCE CONTRIBUTIONS

Strapi

Security Improvements

Website | GitHub

- Collaborated with the Strapi team to address security issues in the open-source headless CMS
- Contributed to ongoing security enhancements, with specific details to be disclosed upon official release

Impler.io

Security Enhancements

Website | GitHub

- Identified and resolved critical security vulnerabilities related to password hashing
- Improved the platform's security infrastructure by implementing robust password protection mechanisms

Origin UI

Component Development

Website | GitHub

- Contributed to the Origin UI open-source project by developing and adding new components
- Enhanced the project's component library, improving its utility and flexibility for developers

EDUCATION

Brototype
 MERN Stack Development
 SNGHSS, chelannur

2023 - Present ozbikode, Kerala

Kozhikode, Kerala

2021 - 2023

Higher Secondary (Science)

Kozhikode, Kerala