



# MUHAMMED SINAN

MERN Stack Developer

📞 +91 8089507749 | ✉️ [muhammedsinan0549@gmail.com](mailto:muhammedsinan0549@gmail.com) |  [GitHub](#) |  [LinkedIn](#)  
💻 [LeetCode](#) | 🌐 [Portfolio](#)

## ABOUT ME

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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

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- **Languages:** JavaScript, TypeScript, SQL, HTML, (S)CSS
- **Frameworks:** Node.js, Express.js, Nest.js, Next.js, TailwindCSS
- **Database:** MongoDB, PostgreSQL
- **Libraries:** React.js, Socket.io, Redux, React-query, Three.js, Framer motion, Radix UI, WebRTC, Axios, JWT, Google AI, 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

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### • 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

## EDUCATION

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