Atharv Raut

Web Developer| Frontend Developer|

+91 7755917479 | atharvr10@gmail.com. | LinkedIn |

A dedicated and performance-driven Frontend Developer with hands-on experience building scalable, secure, and user-friendly web applications using React, JSX, Laravel, Inertia.js, and Tailwind CSS. Adept at translating complex user requirements and compliance workflows into responsive UI components and dynamic data visualizations that enhance usability and maintain performance across modern browsers and devices. Proven expertise in developing secure online exam platforms with proctoring capabilities including real-time camera streaming, recording management, tab-switch detection, and GDPR-compliant video handling.

Skilled in integrating RESTful and real-time APIs, managing full CRUD operations, and architecting reusable frontend modules for high-performance student management systems. Experienced in implementing robust role-based access control, automated testing with Jest and RTL, and real-time dashboards powered by recharts to display fine reports, student-wise summaries, and financial overviews. Strong command over data-driven development, exportable reporting (PDF/CSV), and UI-state handling using modern React paradigms including hooks, lazy-loading, and code splitting.

Effective collaborator with cross-functional teams including QA, DevOps, and backend engineers to streamline CI/CD pipelines, maintain production-ready codebases, and ensure deployment integrity. Experienced in creating verification workflows, proof-upload systems, and automated alerting mechanisms to support incident-based reporting modules. Passionate about building user-centric, scalable frontend applications that solve real-world administrative problems in education, compliance, and finance. Committed to continuous learning and delivering value through clean, efficient, and secure code

TECHNICAL SKILLS

- **Programming Languages/Frameworks:** Python, C, Javascript, Typescript, HTML/CSS, PHP, Reactjs, Laravel, CI3
- **Cloud Providers:** Amazon Web Services (AWS), Azure
- **Database Management:** SQL, snowflake, JIRA
- **Data Analytics & Business Intelligence:** Power BI, Excel, Tableau, MS Office
- **Networking & System Administration:** Windows Servers, MS Active Directory, Load Balancing, TCP/IP
- **Soft Skills:** Critical Thinking, Problem-Solving, Adaptability, Collaboration, Agile Mindset, Communication , Organizational, Interpersonal

Experience

Role: Web Developer

Organization: Sandip University
Duration: Mar 2025 – Present
Location: Mumbai, India

Responsibilities:

- Designed and developed a full-featured student management system frontend using React with Inertia.js, Tailwind CSS, and Laravel Breeze for seamless SPA behavior.
- Built responsive, accessible components for student record management including forms, tables, filters, modals, success overlays, and dynamic charts.

- Implemented a complete Caution Money module to handle student deposits, fines, and remaining balances with real-time UI updates and data integrity validation.

- Developed dashboards featuring live charts and visualizations (line, bar, pie) to represent financial trends, fine distributions, and monthly/yearly analytics using recharts.
- Created complex forms for incident reporting and fine issuance, including image/file upload (proof), date selection, status assignment, and verified-by tracking.
- Engineered a role-based verification flow where the verification team reviews reported incidents, confirms fines, and updates statuses reflected on the student's view.
- Integrated Laravel APIs with frontend forms and tables, enabling create, read, update, and delete (CRUD) operations with real-time error handling and feedback.
- Implemented advanced filtering and search capabilities in student and incident tables including dropdown status filters (All, Paid, Pending) and live keyword search.
- Developed export functionalities for reports and student data in both CSV and PDF formats, covering monthly collections, student-wise history, and incident archives.
- Optimized performance through code-splitting, lazy-loading, and efficient API interaction patterns using axios and debounce mechanisms.
- Collaborated with backend developers to structure MySQL schema, API contracts, and secure data validation and authorization using Laravel Policies and middleware.
- Managed frontend state with hooks and modular logic to ensure maintainability, user feedback (toasts, loaders), and session-aware interactions.
- Deployed React frontend inside the Laravel project and ensured smooth routing via Inertia's SPA routing capabilities.
- Maintained modular, scalable codebase with reusable utilities, layout wrappers (e.g., sidebar with navigation), and page-specific data views.
- Wrote comprehensive documentation for internal use covering data flows, component usage, and setup instructions for future developers.

Role: Intern Front End Developer

Organization: Valt Technologies
Duration: Sept 2024 – Jan 2025
Location: India

Responsibilities:

- Collaborated with product managers and QA teams to define functional requirements for the exam interface and proctoring workflow.
- Translated user stories and compliance guidelines into technical specifications for secure, monitored online exams.
- Architected and implemented the entire Exam section UI using React (JSX), including question navigation, timers, and result summaries.
- Built reusable, accessible components following best practices in component design and state management.
- Integrated the device camera API to capture video streams for live monitoring and recording during exams.
- Implemented media permission handling, gracefully prompting users for camera access and fallback flows for unsupported browsers.
- Developed a proctoring session service to manage start/stop of recordings, chunked uploads, and error handling (e.g. connectivity loss, permissions revoked).
- Established WebSocket connections to stream proctoring footage and metadata (e.g. face detection alerts, tab-switch events) to the backend monitoring dashboard.
- Optimized video encoding settings and upload intervals to balance bandwidth usage and timely delivery of proctoring data.
- Ensured end-to-end encryption of video streams and stored recordings in accordance with data privacy regulations (e.g. GDPR, local privacy laws).

- Implemented secure token-based authentication and role-based access control to prevent unauthorized access to exam content and proctoring feeds.
- Profiled and optimized React render cycles to maintain a smooth user experience during simultaneous video capture and UI interactions.
- Lazy-loaded non-critical components and deferred heavy tasks (e.g. video encoding) to Web Workers to prevent UI jank.
- Partnered with backend engineers to define RESTful and real-time APIs for exam sessions, recording management, and audit logs.
- Authored comprehensive developer documentation and user guides covering setup, troubleshooting, and compliance checklists for exam administrators.

Projects:

Customer Segmentation

- Led a customer segmentation project by collecting, processing, and analyzing customer data from multiple sources.
- Performed exploratory data analysis (EDA) to identify key features influencing customer purchasing behavior.
- Applied clustering algorithms such as K-means to segment customers into distinct groups based on behavior and demographics.
- Developed interactive dashboards and reports to present findings, aiding business teams in understanding customer trends.
- Provided actionable insights to the marketing team, enabling personalized marketing campaigns that improved customer engagement by 15%.

Website Traffic Analysis

- Conducted in-depth analysis of website traffic data using Google Analytics, tracking key performance indicators such as user sessions, bounce rate, and conversion rates.
- Segmented website visitors based on demographics, device type, location, and behavior patterns.
- Created visual reports and dashboards to help stakeholders understand traffic trends and user engagement.
- Identified areas for website optimization, leading to improvements in page load speed and user navigation.
- Recommended strategies that resulted in a 12% increase in lead generation and a 20% improvement in overall website engagement.

Academic Details: Amrutvahini College of Engineering, Sangamner, Maharashtra, India
CGPA : 8.02
Course: Bachelor of Engineering
Majors: Electronics

Certifications
1. Python for Everybody(University of Michigan)
2. Power BI (Microsoft)
3. Generative AI(Google)
4. Responsive AI (Google)
5. Data Analytics (Google)