

SMART CAMPUS

UNIFIED ERP SYSTEM

✿ **TEAM NAME: DELTA**

✿ **PRESENTED BY:**

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✿ **COLLEGE NAME:**

ST. XAVIER'S COLLEGE, BURDWAN

✿ **SELECTED PROBLEM:**

CAMPUS MAINTENANCE & ISSUE TRACKING SYSTEM



PROBLEM UNDERSTANDING

CHALLENGES IN TRADITIONAL CAMPUS SYSTEMS

- Issue reporting is mostly manual and unstructured
- Students have no way to track issue status
- Administrators lack a centralized monitoring system
- Delayed resolution leads to poor campus experience
- No transparency or accountability

WHY THIS IS A PROBLEM

- Wastes time and resources
- Reduces student satisfaction
- Creates communication gaps between students and administration



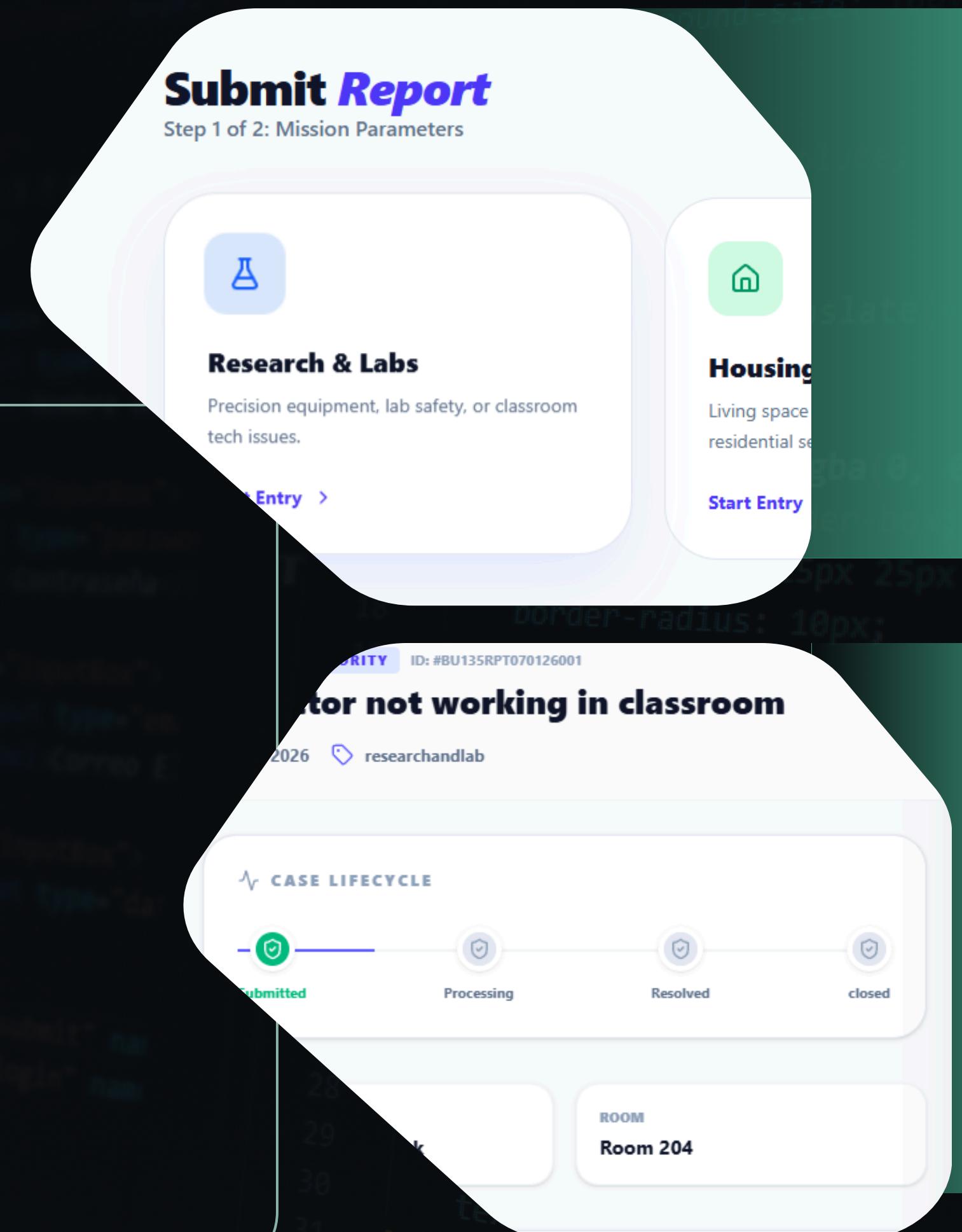
SOLUTION OVERVIEW

OUR SOLUTION: SMART CAMPUS ISSUE TRACKING SYSTEM

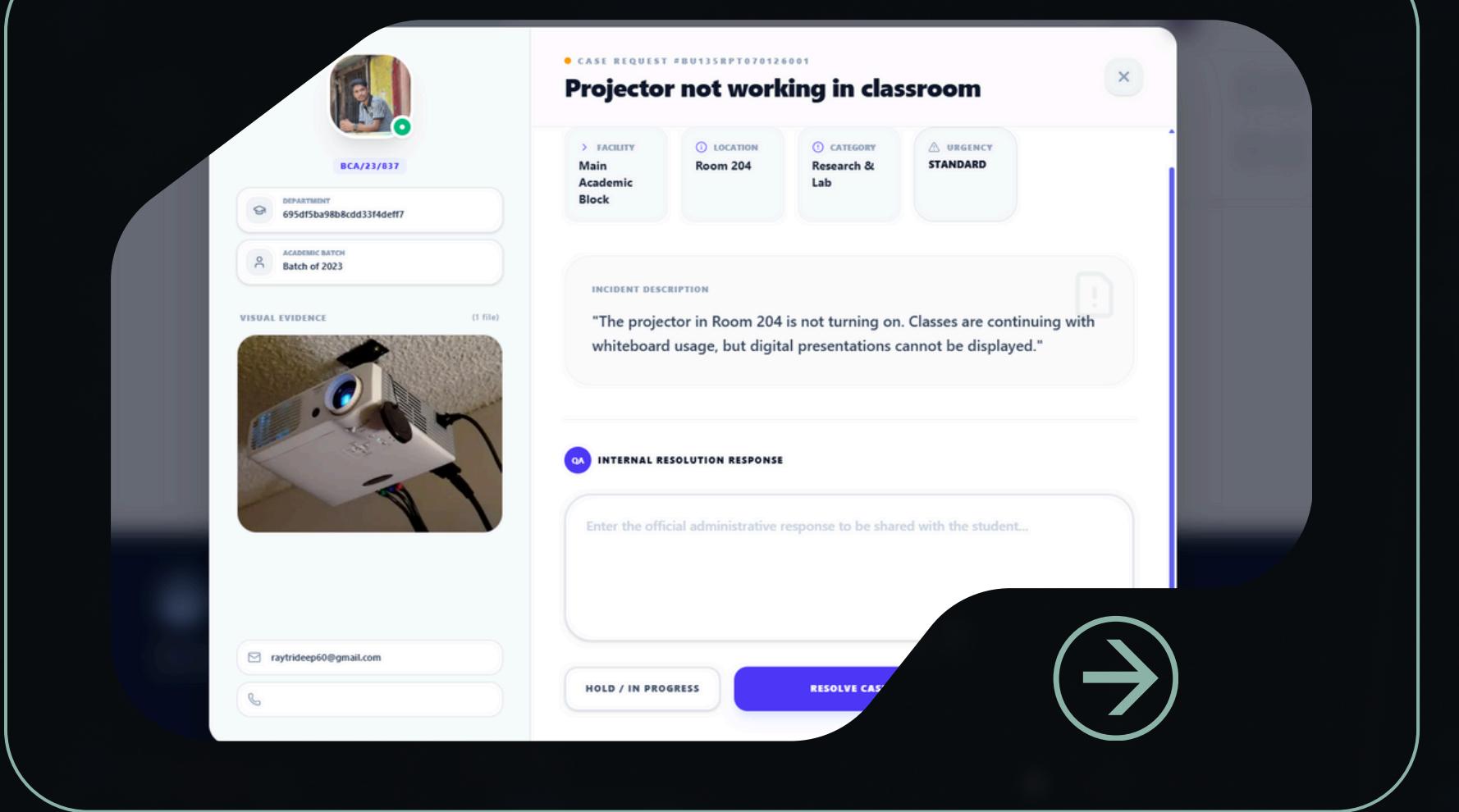
- A web-based platform for managing campus issues digitally
- Allows students to report issues with title, description, and images
- Provides real-time issue status:
Submitted → In Progress → Resolved
- Enables administrators to track, manage, and resolve issues efficiently
- Ensures secure access and role-based control

KEY BENEFITS

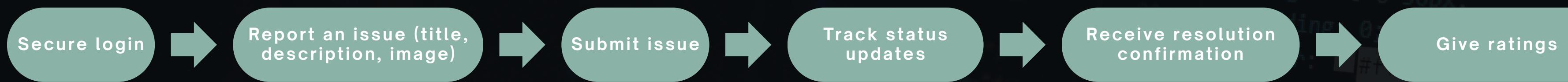
- Faster issue resolution
- Improved communication
- Increased transparency and accountability



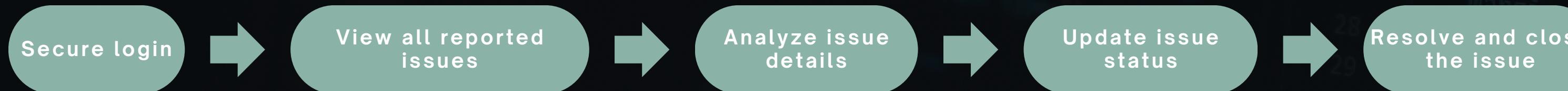
USER & ADMIN WORKFLOW



Student Workflow



Admin Workflow



SYSTEM ARCHITECTURE

Frontend (React + Vite + Tailwind)



Backend API (Node.js + Express)



Authentication Layer (JWT, Cookies)



Database (MongoDB + Mongoose)



Cloud Services (Cloudinary, Email, Payments)

Frontend Layer

- React + Vite → Fast, modern UI development
- Tailwind CSS → Responsive design
- Framer Motion → Animations & UX
- Recharts → Visual analytics & charts
- Axios → API communication
- QR Tools & jsPDF → QR generation & report export
- Hot Toast → Live user notifications

Backend Layer

- Node.js + Express → REST API server
- JWT + Cookies → Authentication & sessions
- MongoDB + Mongoose → Data management
- Multer + Cloudinary → File & image uploads
- Nodemailer → Email services
- Razorpay → Secure payment processing

CORE FEATURES

The screenshot displays a mobile application's main screen. At the top is a navigation bar with tabs: 'Office Overview' (selected), 'Student Records', 'Campus Issues', 'Canteen Authority', 'Library Authority', 'College-info', 'College-Policy', 'Teacher Management', and 'Department'. Below the navigation bar are three main sections: 'Intelligence Command' (with 'SYSTEM HEALTH: STABLE' status), 'GROSS REVENUE ₹3020 VOLATILITY: ±108%', and 'RESOLUTION RATE 0.0% 2 ACTIVE CASES'. The bottom section is 'Revenue Velocity Analysis' with a subtitle 'PREDICTIVE LEAST SQUARES REGRESSION', showing a graph with a blue line and two blue bars at 17:00 and 18:00. A large green arrow points from the bottom right towards the 'Student Features' section.

STUDENT FEATURES

- Secure login
- Report campus issues with title, description & image
- Track real-time issue status
- View issue history & updates
- Receive email notifications

ADMIN FEATURES

- Secure admin authentication
- Centralized issue dashboard
- View, filter & manage reported issues
- Update issue status: Open / In Progress / Resolved
- Full visibility of campus operations

Role-based access control

Dynamic and Real-time UI feedback

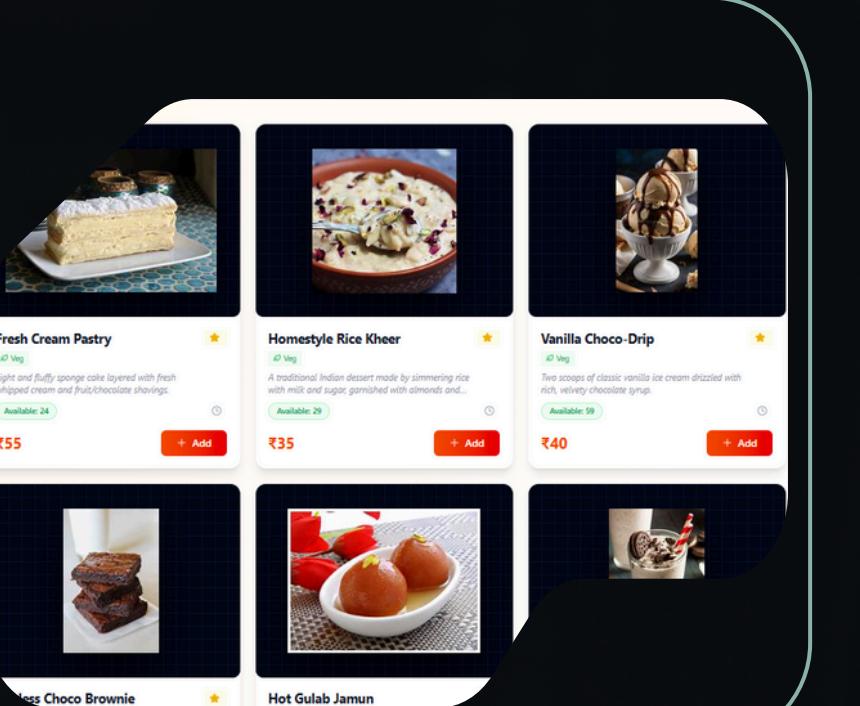
Scalable & secure architecture

ADDITIONAL FEATURES



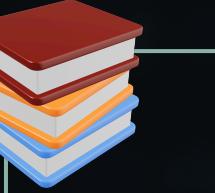
Canteen Management

- Online food ordering system
- Secure online payments
- Live order tracking for students & staff



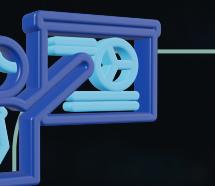
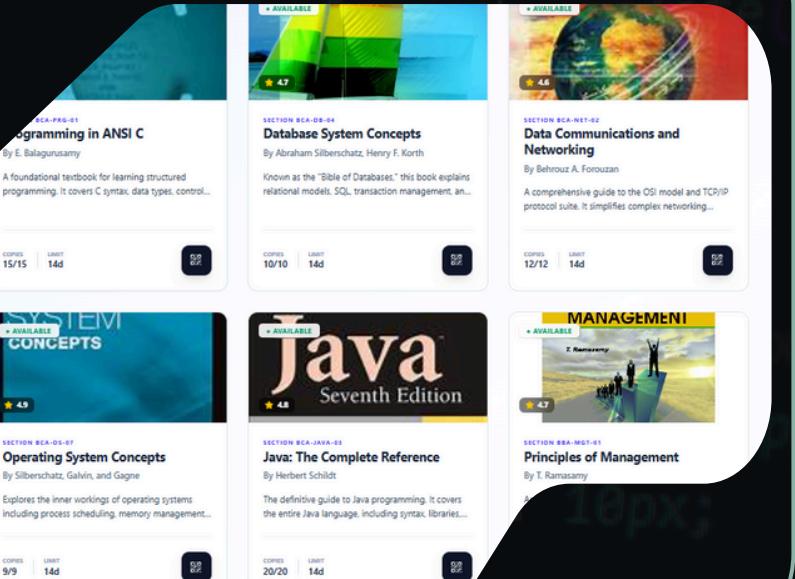
Campus Engagement

- College Gallery for campus activities
- Admin uploads images, students view updates



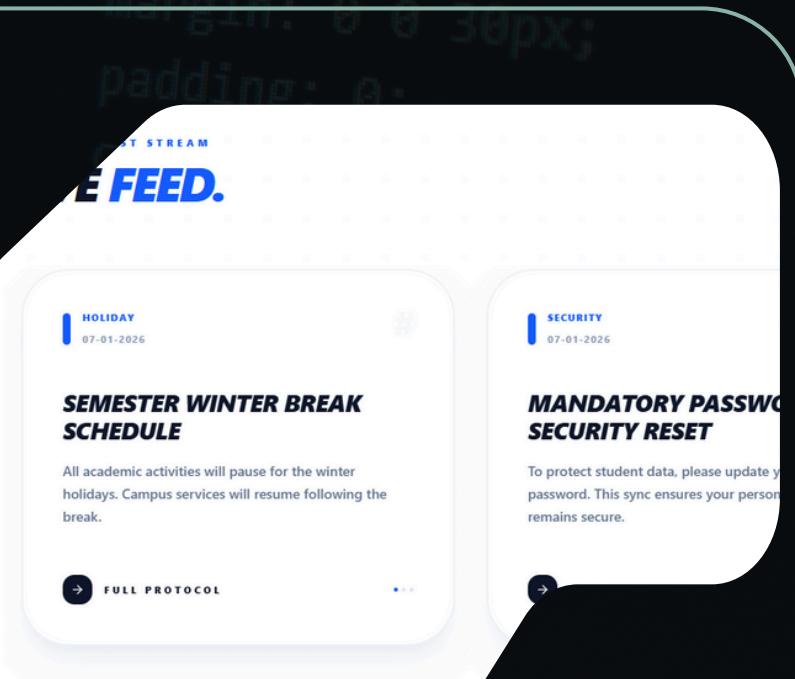
Library Management

- Complete book catalog system
- Book issue & return workflow
- Student library profiles



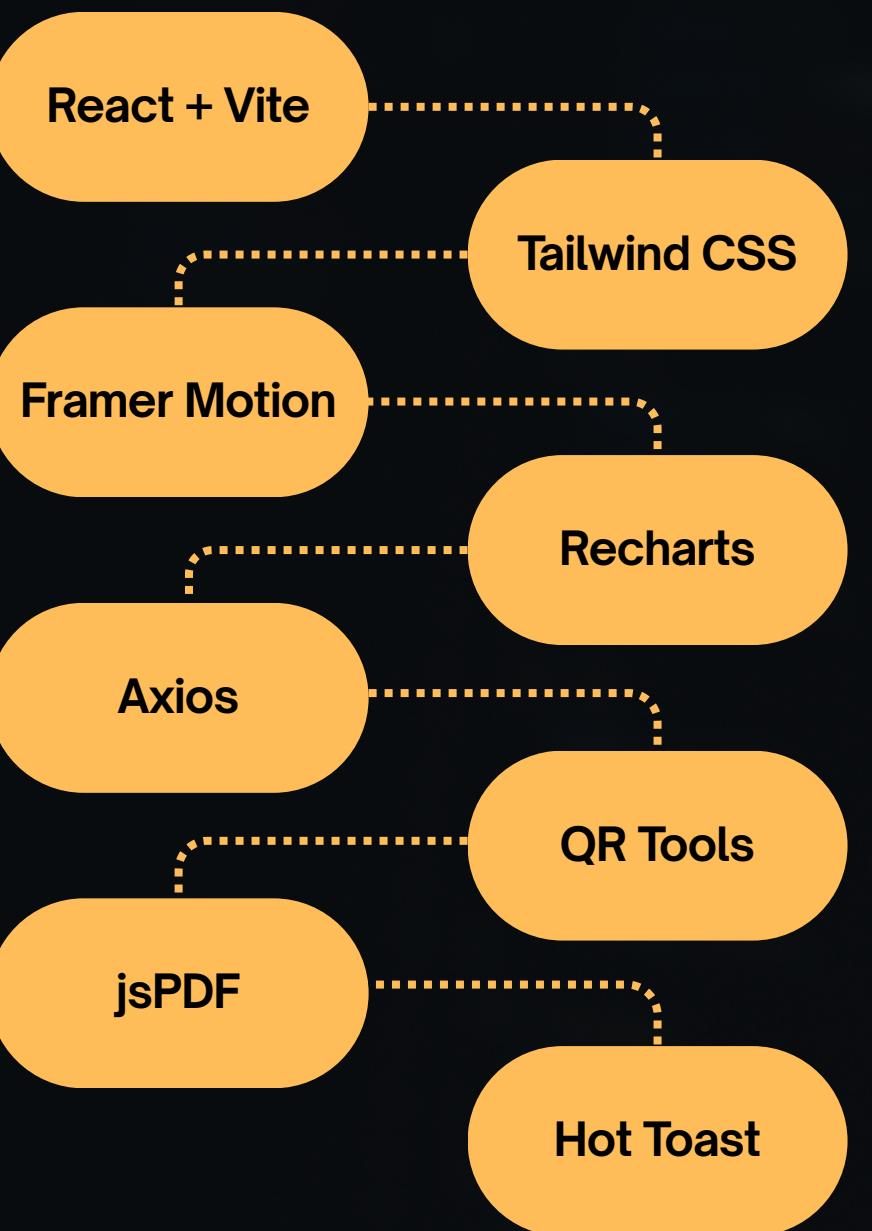
Communication System

- Admin publishes college notifications
- Students receive real-time updates

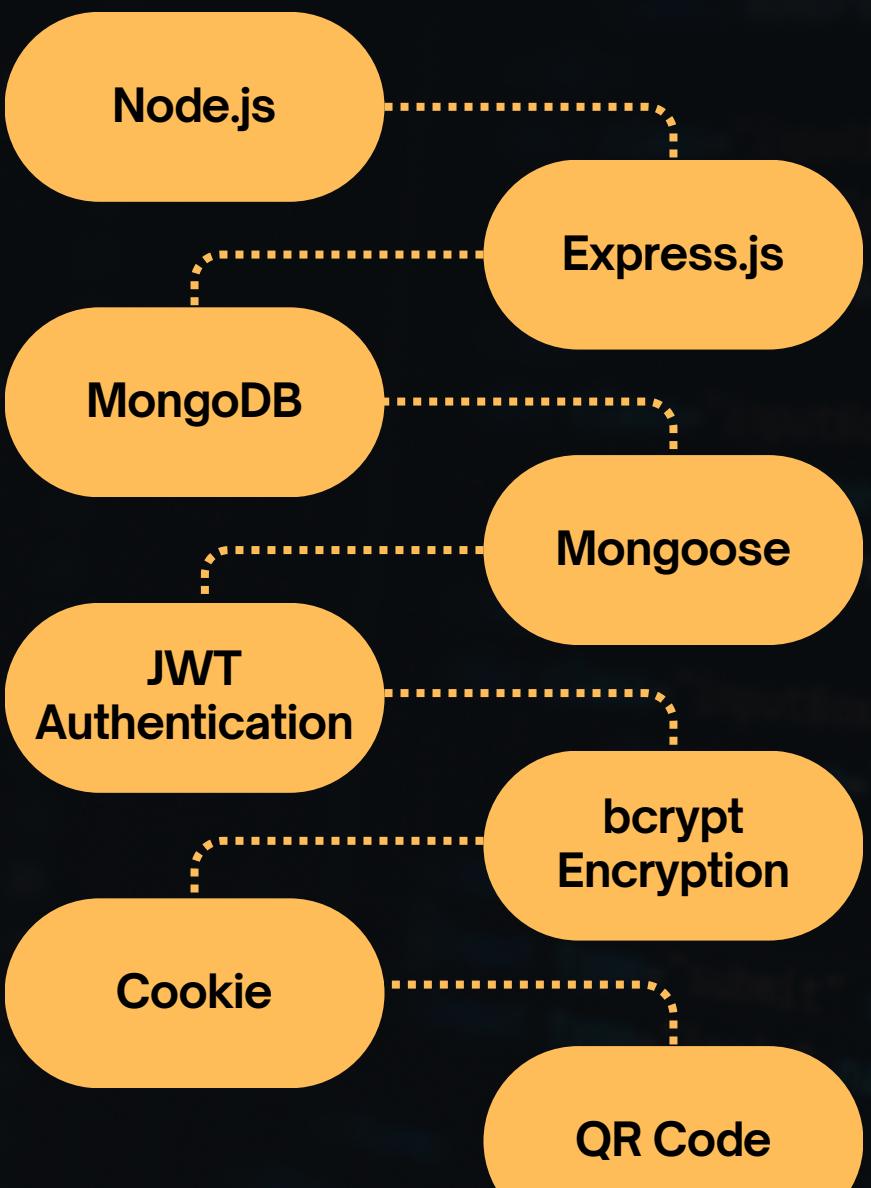


TECHNOLOGY STACK

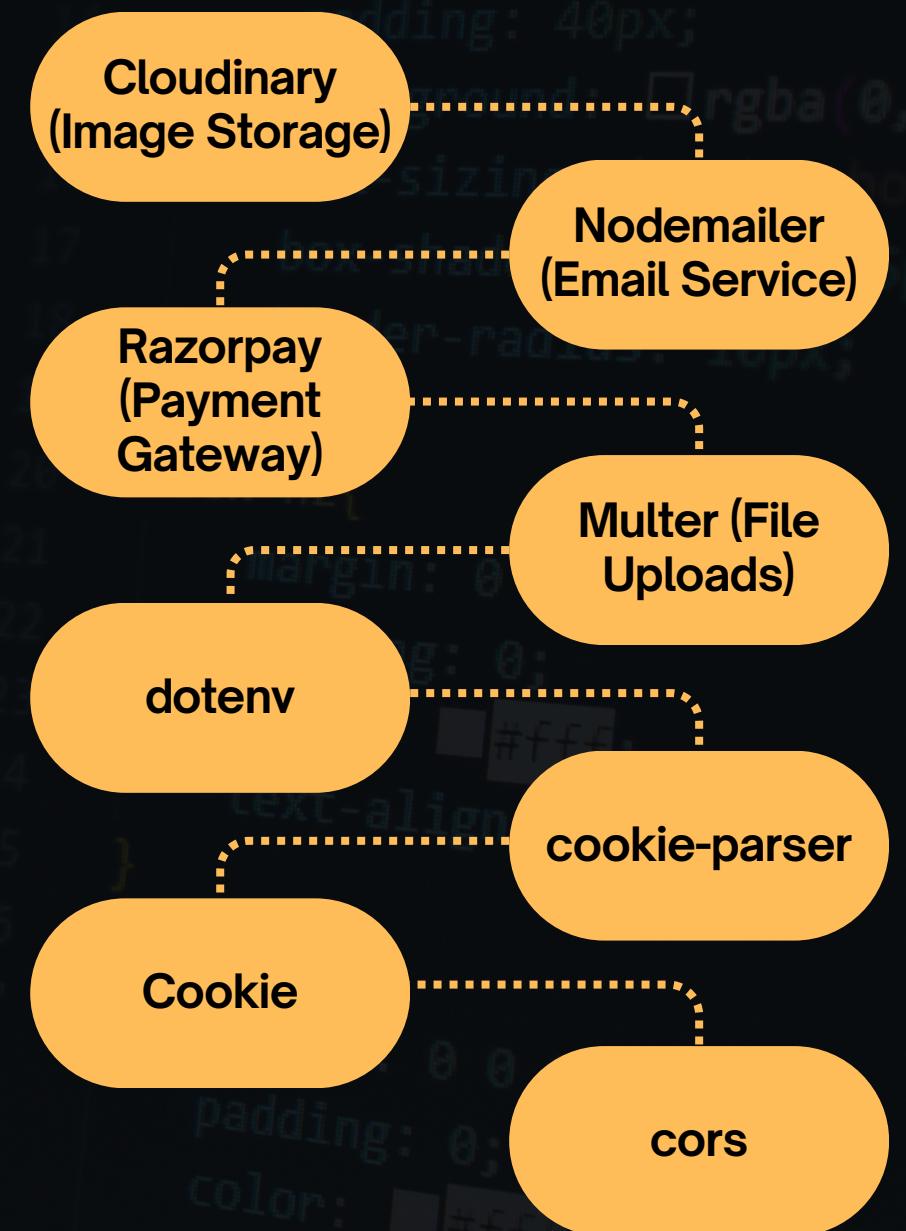
FRONTEND



BACKEND



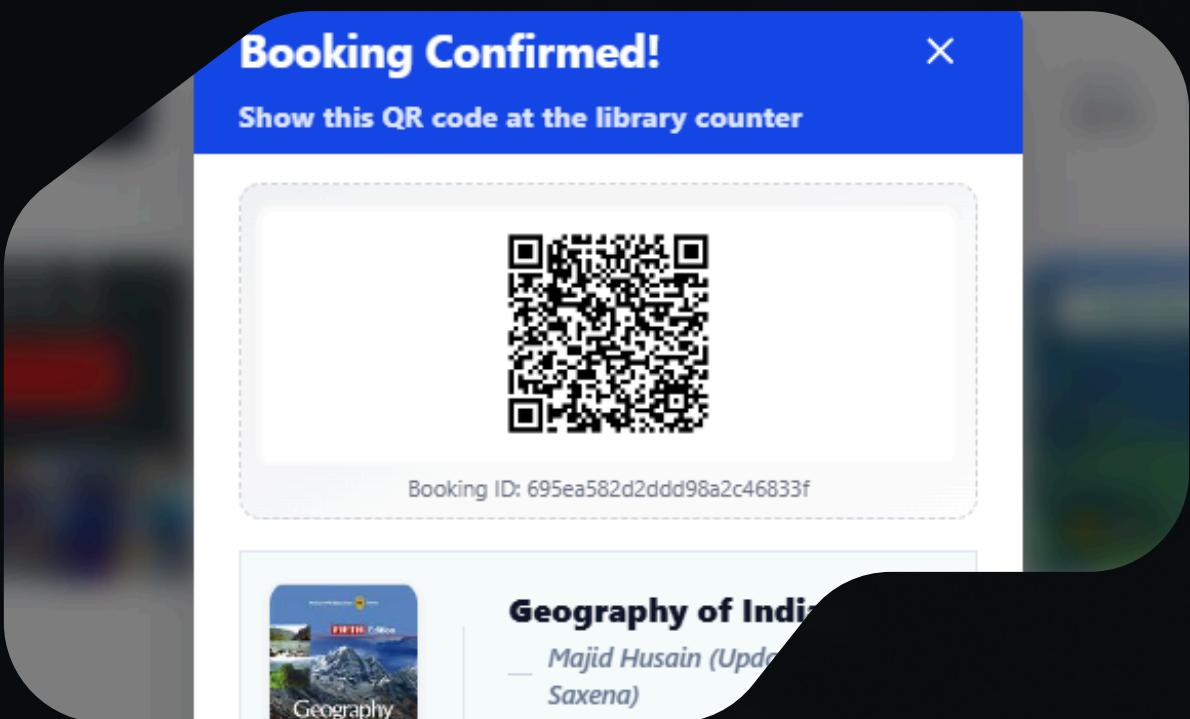
SERVICES & TOOLS



CONCLUSION & IMPACT

Project Impact

- Digitizes critical campus operations
- Reduces manual workload for administration
- Improves communication between students and staff
- Enhances transparency & accountability
- Creates a scalable foundation for a fully digital campus



Report Campus Issues Instantly

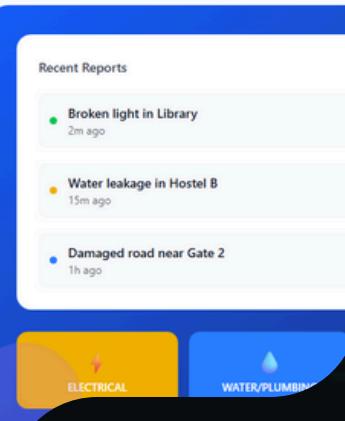
An AI-powered platform to report, track, and resolve campus infrastructure issues efficiently. Make your campus safer and better.

[Report an Issue](#) [View Dashboard](#)

500+ ISSUES RESOLVED

2.5 Days AVG RESPONSE TIME

95% SUCCESS RATE



Why Smart Campus Matters

- Smart Campus is not just a project — it is a complete **digital transformation framework** for educational institutions that modernizes campus operations, improves administrative efficiency, and enhances the overall student experience.
- Our vision is to build a **queue-less, paperless, and fully connected campus**, where students and administrators can access essential services instantly without long waiting times or manual processes.
- By integrating all core campus services into one intelligent platform, Smart Campus creates a transparent, efficient, and future-ready educational ecosystem.



THANK YOU



TEAM NAME: DELTA

MEDIUM PRIORITY ID: #BU135RPT080126001

Power outage disrupted ongoing lab experiment

1/8/2026 researchandlab

CASE LIFECYCLE

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graph LR; A(( )) --> B(( )); B --> C(( )); C --> D(( ));
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Submitted → Processing → Resolved → closed