COLLEGE CODE : 9222

COLLEGE NAME : THENI KAMMAVAR SANGAM COLLEGE OF TECHNOLOGY

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Completed the project named as Phase_4_ TECHNOLOGY

PROJECT NAME : IBM-NJ- FEEDBACK COLLECTION SYSTEM

SUBMITTED BY,

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FEEDBACK COLLECTION SYSTEM

ENHANCEMENT & DEPLOYMENT

UI/UX Improvements:

Redesigned user interface for both admin and user dashboards.
Improved mobile responsiveness and accessibility.
Streamlined feedback submission flow for enhanced usability.
Modern design elements (animations, transitions, intuitive layouts).

API Enhancements :

Optimized existing RESTful APIs for better performance and clarity.
Added support for filtering, pagination, and sorting of feedback data.
Role-based access control for API endpoints (admin vs. user).
API documentation using tools like Swagger or Postman.

Performance & Security Checks :

Code and database optimization for faster load times.
Implementation of rate limiting and throttling on API endpoints.
Input validation and sanitization to prevent SQL Injection and XSS attacks.
Use of HTTPS, secure headers, and data encryption in transit.

Testing of Enhancements :

Unit tests for backend logic (e.g., feedback submission, user roles).
Integration testing for full workflows (e.g., login → submit feedback → view feedback).
UI/UX testing for responsiveness and design compliance.
Automated testing tools (Jest, Mocha, Cypress) and manual testing procedures.

Deployment :

Deployment of frontend and backend to reliable cloud platforms
Frontend: Netlify or Vercel
Backend/API: Render, Railway, or any Node-compatible cloud service
Database: Cloud-based database like MongoDB Atlas or PostgreSQL on Superbase
CI/CD pipeline setup for smooth future updates.
Environment variable configuration and deployment security measures.

Technology Stack:

Frontend: React.js / Next.js / Tailwind CSS
Backend: Node.js / Express.js
Database: MongoDB / PostgreSQL
API Testing: Postman / Swagger

Additional Features:

UI/UX Improvements :

- Revamped user interface for better usability and responsiveness.
- Improved design for both users and administrators.

API Enhancements :

- Optimized and extended APIs with better structure, validation, and security.
- Added features like filtering, sorting, and role-based access.

Performance & Security Checks :

- Enhanced system speed through code and database optimization.
- Implemented security measures such as input validation, HTTPS, and data protection.

Testing of Enhancements :

- Conducted unit, integration, and UI testing to ensure reliability.
- Used tools like Jest, Postman, and Cypress for testing workflows and API endpoints.

Deployment :

- Deployed the system on cloud platforms like **Netlify** or **Vercel** (frontend) and **Render/Railway** (backend).
- Configured CI/CD pipelines and environment variables for smooth operation.