

FULL STACK WEB DEVELOPER COURSE PROJECT REPORT

INDUSTRY COACH: Prashanth K

PROJECT TITLE: EMPOWERING STUDENT VOICES

Team Member Details

NAME	REG-NO	BRANCH
CH.S. Pavan Kumar	21PA1A6112	Artificial Intelligence and Machine Learning
CH. Nani Babu	21PA1A6108	Artificial Intelligence and Machine Learning
M. Manohar	21PA1A6140	Artificial Intelligence and Machine Learning

Department

Faculty Coordinator Name: Faculty Coordinator Signature:

HOD Name: D.G. Krishna Mohan HOD

Signature:

Introduction:

Project Overview: The aim of our project is to enable students to report college issues anonymously. This platform ensures transparent communication between students and higher authorities. Student submit complaints categorize by type. The system provide real time updates, allowing students to track their complaints. A feedback mechanism improves the system iteratively. Empowering Student Voices promotes accountability, trust and efficiency within educational institutions, creating a safer and more responsive campus environment. Website consists of student signup, login, student problem submission page, HOD login and after hod login it displays the problems in the department.

Team Information: The team consists of 3 members.

CH S Pavan Kumar- Frontend development

M Manohar - Backend development

CH Nani Babu - Documentation, Information collecting

Technology Stack:

Frontend: HTML, CSS, Javascript, EJS

Backend: Express.js, Node.js

Database: Firebase Realtime Database

Authentication: Firebase Authentication

Security: Hashing

Implementation Details:

<u>User authentication:</u> Firebase Authentication is used to handle user signup and login processes securely. Passwords are hashed using npm-bcrypt-hash package before storing them in the database.

<u>Database Management:</u> Firebase Realtime Database is utilized to store user profiles. The database is structured to efficiently manage the vast amount of information.

Frontend Development: The user interface is designed using HTML, CSS, EJS and Javascript. The website is responsive and userfriendly, ensuring a seamless experience across various devices.

<u>Installation and Setup:</u> The packages installed to set up this project are express, dotenv, body-parser, bcrypt-hash, request, ejs, js, firebase-admin.

<u>Project Structure:</u> The organization of project files and directories are arranged in such a manner that each folder and each file has connection with each other. The folders are views, assets. The views folder consists of ejs files and public folder consists of css,images and js files and main folder consists of server.js and key.json files.

Functionality:

Features:-

Our project is all about allowing the student problems to higher authorities at our college. It consists of student signup, login functionalities after student successful login it allows to submit the problem .The user registrations, logins and problems are stored in the Firestore database. The website allows HOD to login with the credentials like respective department name and password.After HOD login the website displays all the problems that are raised in the selected department. The HOD address the issue and solve them.

<u>User Stories:</u> The users HOD or student is using the website they need to sign up to set up a password and after which they need to login. By login in to the website they can use the above features.

Frontend Documentation:

<u>UI Components:</u> The UI components included in the project are Flex, navigation bar etc.

Screenshots:

Conclusion:

Empowering student voices is crucial for fostering an inclusive and progressive educational environment. When students feel empowered to express their opinions, ideas, and concerns, it enhances their confidence, critical thinking, and communication skills. It promotes a sense of ownership in their learning journey, fostering active engagement and participation. Additionally, empowering student voices encourages schools and institutions to be responsive to the needs and perspectives of their student body, leading to more effective policies and a positive learning atmosphere. Overall, recognizing and supporting student voices not only enriches their educational experience but also contributes to the overall growth and development of the educational community.