Pratik Raj Verma

Full-Stack Web Developer

LinkedIn | erpratikrajverma@gmail.com | Github | 7903209052 | Jaipur

BTech	Information Technology
Gender	Male
DOB	14/09/2001

ACADEMICS

Examination	University	Institute	Year	Grade
Graduation	Rajasthan Technical University	Arya college of Engineering and IT	2020-24	8.67 CGPA

KEY PROJECTS

Local Area Teacher Interaction Platform: - (https://thehacktech.vercel.app) (Feb 24 - May24)

Description: Spearheaded the development of a sophisticated MERN stack web application enabling localized teacher-student interaction through **pin code-based** searches, comprehensive profiles, and video demos.

Key Contributions:

- **Frontend Development:** Architected a user-centric frontend using **React.js**, ensuring seamless navigation and optimal user experience. Managed global state with **React-Redux** and styled the application using Tailwind CSS for **responsive design**. Handled HTTP requests and API interactions using **Axios**, and utilized React **hooks** (useState, useEffect, useDispatch, useSelector, useNavigate etc) for specific functionalities
- **Backend Development:** Engineered robust backend functionalities with **Node.js** and Express.js, facilitating secure and efficient server operations. Employed **Nodemon** for real-time server updates and tested APIs using **Postman**.
- **Database Management:** Implemented Leveraged **MongoDB** for efficient storage and retrieval of user profiles and communication logs. Integrated **Cloudinary** for managing video data, enhancing storage capabilities.
- **Security Measures:** Implemented secure user authentication and authorization mechanisms using **JWT**, with session management via **cookies** and password hashing using **Bcrypt**. Implemented Enhanced security through OTP-based user verification using **OTP Generator**, and email notifications via **Nodemailer**. Used **crypto**-random-string to generate secure tokens for various functionalities, ensuring data integrity and security.
- **Additional Features:** Developed advanced search filters to improve course discovery Ensured adherence to industry best practices for data security and robust performance under varying conditions.

Social Media API Development: -

Description: Led the development of a robust backend system for a social media website using Express.js. The platform enables users to interact by liking and commenting on posts. Utilized Postman for API testing and validation, ensuring seamless integration and robust performance

Key Contributions:

- Designed and implemented **RESTful APIs** using Express.js, enabling user authentication, **post creation**, liking, and commenting functionalities.
- Engineered a scalable **backend architecture** to efficiently handle user interactions and data management.
- Integrated **MongoDB** for persistent storage of user profiles, posts, likes, and comments, ensuring optimal performance and scalability.
- Rigorously tested and validated **APIs** using **Postman**, ensuring adherence to specifications and robust performance under varying conditions.

TECHNICAL SKILLS

Language:	C++	Javascript
Front End:	HTML	CSS	Javascript	React.js	Tailwind CSS	Figma
Back End:	Node.js	Express.js	Mongoose	Nodemon
Database:	Mongo DB
Tools:	VS-Code	Postman	Git and Github	Browser Developer Tool

CORE SKILLS

- Object-Oriented programming System
- Data Structure & Algorithms
- Computer Networking
- Database Management system
- Operating System

OTHER ACTIVITIES

- Certified for **research paper** in resolving the issue of "Callback Hell" in JavaScript through the utilization of Promise and Async-Await mechanisms in **International Journal** of Research Publication   (research paper)
- Researched and implemented strategies to enhance code readability, maintainability, and performance in asynchronous JavaScript programming paradigms.   (certificate)
- **Competitive Programming**:
  LeetCode: Completed 100+ questions, demonstrating proficiency in problem-solving and algorithmic thinking.   (Leetcode Acc.)
  CodeChef: Achieved rating of 1000+, showcasing coding skills and problem-solving ability in competitive programming   (Codechef Acc.)