Enrollment no: 210280116082



NAME OF STUDENT: VINAYAK TUSHARBHAI CHAVDA

DIARY OF THE WEEK: Dt: 10/02/2025 TO 14/02/2025

DEPARTMENT: INFORMATION TECHNOLOGY SEM: 8th

NAME OF THE ORGANISATION: BUCHANAN TECHNOLOGIES LLP

NAME OF THE PLANT/SECTION/DEPARTMENT: EMERGING TECHNOLOGIES

NAME OF OFFICER INCHARGE OF THE PLANT/SECTION/DEPARTMENT: HARDIK SHETH

This week, I made solid progress on the task management project, beginning with the setup of a basic template provided by my mentor. I worked on implementing models using the database-first approach, which helped establish a structured foundation for the data layer. This allowed me to gain a better understanding of how the application’s data is managed and how it will interact with the database as the project develops.

Once the models were set up, I focused on building the API, where I successfully implemented CRUD operations for user management. I created the necessary endpoints to allow users to be created, updated, read, and deleted. I tested these operations thoroughly to ensure the API was functioning correctly and was ready for further integration with the frontend.

On the 12th, I shifted focus to security by integrating JWT Authentication and Authorization into the API. I took the time to understand how JWT tokens work and learned how claims are used for role-based access control, ensuring users can only access data they are authorized to view. This was an important step in securing the application and controlling user permissions effectively.

Finally, I worked on the frontend, where I developed pages to allow users to manage and view their tasks. I also integrated user and admin authentication, ensuring that different roles had access to the appropriate features. Towards the end of the week, I made updates to both the frontend and backend to improve functionality, ensuring everything worked smoothly together. Overall, it was a productive week filled with new challenges and a lot of hands-on learning.



**TOTAL HOURS: 40 HOURS**

**SIGNATURE OF STUDENT**

**The above entries are correct and the grading of work done by Trainee is EXCELLENT / VERY GOOD / GOOD / FAIR / BELOW AVERAGE / POOR**

**Signature of Faculty Mentor**

**Signature of officer-in-charge of Dept. / Section / Plant**

**Date:**

**Date:**

**Grading of Work, for trainee may be given depending upon your judgement about his Punctuality, Regularity, Sincerity, Interest taken, Work done etc.**