**TASK : DYNAMIC DEADLINE**

**Project Overview**

The Task Management Dashboard is a web application designed to enhance task tracking and team collaboration. Developed using JavaScript, its frameworks Express and Node.js, and integrated with the Asana API, this tool simplifies task and project management. The application offers a dynamic interface with real-time updates, enabling teams to stay organized and productive. Key features include:

* Task Prioritization: Users can assign priorities (High, Medium, Low) to tasks.
* Dynamic Due Date Management: Automatically adjusts task deadlines based on priority:
* High Priority: Adds 2 days from the current date.
* Medium Priority: Adds 7 days from the current date.
* Low Priority: Adds 14 days from the current date.
* Adjustments avoid Sundays by postponing deadlines to the next Monday if necessary.
* Interactive Dashboard: Displays projects, tasks, and their associated details (priority, due dates, and assignees).
* Real-Time Updates: Allows users to update task due dates and priorities seamlessly.

By offering custom fields for task prioritization and integrated due date logic, the dashboard provides an intuitive and efficient project management solution, ensuring deadlines are consistently managed and high-priority tasks are given the attention they need.

**Challenges Faced and Trial and Error Approach**

At the start of the task, my first priority was to thoroughly understand the problem and identify the steps required to achieve the project goals. My primary focus was on addressing the first objective, as I believed completing it would serve as a solid foundation for the entire project.

Initially, I encountered difficulties in setting up the API and managing project and task creation within the Asana platform. Once I overcame these challenges, the next hurdle was integrating the Asana platform with my code. This step was particularly challenging, as I faced multiple server errors and connection issues during the integration process. After careful troubleshooting and testing, I successfully resolved these errors.

With the integration in place, I was able to fetch project names and their associated tasks, organize them efficiently, and implement dynamic due dates based on task priority. This was a significant achievement as it required a detailed understanding of both the Asana API and real-time data updates.

However, I could not fully accomplish the second objective within the scope of the task. Despite this, I believe my contributions effectively fulfill the first goal of the project. The system I developed enables due dates to be assigned dynamically based on task priority, with these updates reflecting seamlessly in the Asana platform.

This experience not only enhanced my technical skills but also deepened my understanding of API integrations and error handling in real-world scenarios. I am confident that the work I completed adds substantial value to the project and provides a strong foundation for further improvements.

**Outcome**

The Dynamic Deadline Task Management Dashboard\*\* effectively fulfills the project's first goal by ensuring seamless task prioritization and deadline management. It provides a clear and interactive interface, dynamically assigns due dates based on task priority, and ensures these updates are reflected directly in the Asana platform. The integration of APIs was managed properly, and the features were executed successfully, demonstrating a robust and efficient approach to project management.

However, the second goal of the project remains unaccomplished due to time constraints. Despite this, the work completed on the first goal addresses the primary requirements of the project and sets a strong foundation for achieving the second goal in the future.

**Learning and Takeaways**

* Real-Time Data Handling: Learned to build dynamic web interfaces that update task details seamlessly.
* Problem-Solving: Overcame challenges by shifting focus, analyzing errors, and iteratively refining solutions.
* Time Management: Prioritized tasks efficiently, ensuring project requirements were met within deadlines.