

## Requirements Planning

In this phase, the focus is on understanding the overall goals of Lie Marc Enterprise and identifying the key features the system must include. Meetings are conducted with stakeholders such as the business owner, inventory personnel, and possibly supplier representatives to gather detailed requirements. The team defines what the system should accomplish, such as real-time monitoring of supplier products, tracking delivery schedules, and receiving alerts for low inventory. This stage ensures that everyone involved has a shared understanding of the system's objectives and boundaries before moving forward.

## **User Design**

The final phase is the deployment of the completed system. Here, the web-based supplier product monitoring system is installed on a live server, and actual users at Lie Marc Enterprise begin to use it in real operations. Training sessions may be conducted to help staff understand how to navigate and use the system effectively. The development team monitors the system to identify any issues or bugs, and maintenance support is provided as needed. Documentation is finalized, and the system becomes a fully operational tool that improves product monitoring and supplier coordination for the business.

## Construction

During the construction phase, the actual development of the web-based system takes place. Developers begin coding the front-end interface and back-end functionality based on the designs approved in the previous phase. Technologies such as HTML, CSS, JavaScript, PHP, may be used, along with a database like MySQL or Firebase to

manage supplier and inventory data. This phase also includes integration, testing, and continued feedback from users. Regular updates and working prototypes are shown to stakeholders to ensure the system is being built according to expectations and business goals.

## Cutover

The final phase is the deployment of the completed system. Here, the web-based supplier product monitoring system is installed on a live server, and actual users at Lie Marc Enterprise begin to use it in real operations. Training sessions may be conducted to help staff understand how to navigate and use the system effectively. The development team monitors the system to identify any issues or bugs, and maintenance support is provided as needed. Documentation is finalized, and the system becomes a fully operational tool that improves product monitoring and supplier coordination for the business.

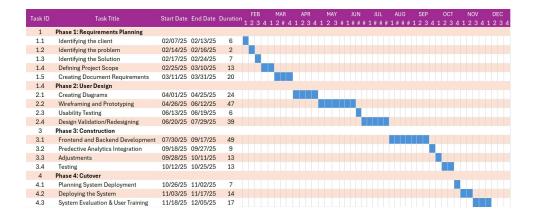


Figure 8 : Gant Chart

This Gantt chart outlines a project divided into four main phases: Requirements Planning, User Design, Construction, and Cut-over. Requirements Planning (February 7 to March 31, 2025), focuses on identifying the client, understanding the problem, proposing a solution, and defining the project scope. It concludes with a 20-day task to complete the documentation requirements, which is the longest task in this phase. User Design (April to late July), involves planning the system's interface and user experience.

Key tasks include creating diagrams, wire-framing, prototyping, usability testing, and design validation. Wire-framing and prototyping stand out as one of the longest and most critical tasks, shaping how users will interact with the system. Construction (late July to late October), focuses on building the actual system through front end and backend development, integrating predictive analytics, making necessary system adjustments, and conducting testing. Tasks are designed to overlap, allowing steady progress and effective time management. Cut over (late October onward), ensures the system transitions smoothly into production. It includes deployment planning, execution, system evaluation, and user training, making sure the solution is successfully launched and users are well-prepared to operate it.