

WEEK ONE

Monday: Orientation and Introduction

On my first day of Industrial Training, I was welcomed into the organization and attended an orientation session. I was introduced to the organization's structure, mission, vision, and core values, as well as workplace rules, safety guidelines, and intern expectations. I also became familiar with the work environment, met staff members, and learned the importance of professionalism, teamwork, and time management.

Tuesday: IT Department Overview

I was introduced to the IT department, its tools, and common workflows. The session covered basic software development practices, version control systems, and an overview of existing projects, highlighting how technology is used to solve real-world, agriculture-related problems.

Wednesday: Supervisor Assignment

A supervisor was assigned to me, who explained my responsibilities, learning objectives, and expectations. We also discussed potential project ideas, and I was encouraged to propose a technology-based solution to a real agricultural challenge.

Thursday: Project Selection and Planning

After discussing with my supervisor, I proposed a web-based application called *Farmculator* to help farmers perform essential agricultural calculations. The idea was approved, and I began planning the application's features, scope, target users, and documenting initial requirements.

WEEK TWO

Monday: Requirement Analysis

I conducted a detailed requirement analysis for the *Farmculator* project by identifying user needs, key agricultural calculations, and system functionality. Both functional and non-functional requirements were documented and reviewed with my supervisor for feedback.

Tuesday: System Design

I designed the application structure, including page layouts and navigation, with a simple, farmer-friendly interface. Technology choices were finalized, selecting a full-stack framework (TanStack Start) for backend logic and Supabase as the database to support accessibility and deployment.

Wednesday: Development Setup

I set up the development environment and initialized the project repository. Basic components of the application were created, and the project structure was organized for scalability and maintainability.

Thursday: Core Feature Development

I implemented user authentication using Supabase Auth and developed the logic for sales tracking and dashboard functionality, including designing and writing SQL schemas in Supabase.

WEEK THREE

Monday: Feature Enhancement

I implemented an AI-powered summary feature, as suggested by my supervisor using OpenAI, and added chart functionality to provide a clear visual representation of the dashboard data.

Tuesday: User Interface Improvement

I designed the homepage inspired by Dribbble, handling the project from start to finish. I also improved the UI for sales tracking and the AI summary, ensuring responsiveness across mobile, tablet, and desktop screens.

Wednesday: Features Enhancement

I implemented a token-based sharing system, allowing unauthenticated users to view sales and access AI summaries. I also developed a chat feature, enabling users to interact with AI in a conversational manner, similar to ChatGPT

Thursday: Testing

I tested the application thoroughly to identify errors and bugs. Issues related to calculations and responsiveness were fixed.

Feedback from my supervisor helped improve the reliability of the system.

WEEK FOUR

Monday: Performance Optimization

I optimized the application for faster loading and smoother interactions. Code cleanup and restructuring were also carried out to improve maintainability.

Tuesday: Final Feature Integration

All features of the Farmculator application were integrated and reviewed. I ensured that calculations were accurate and outputs were clearly displayed to users in the dashboard and chart sections.

Wednesday: Deployment

The application was deployed online using a hosting platform called vercel, making it publicly accessible.

I verified the deployed version and ensured it functioned the same as the development

version.

Project link: <https://farmculator.vercel.app/>

Thursday: Documentation

I prepared documentation for the project, explaining the purpose, features, technologies used, and how users can interact with the system.

This documentation will help future developers and users understand the application.

Friday: Project Review and Conclusion

I presented the completed project to my supervisor for final evaluation. Feedback was provided, and improvements were discussed.

The training concluded with a reflection on the skills gained, including web development, problem-solving, teamwork, and professional communication.