Team 16

McKenna Groves, Adam Khan, Quinn Meier, Evan Trout, Mark VanLandingham

Project Name

Autofarm Web Application

Project Synopsis

Web application that connects customers to their Terrafarm modules for real-time monitoring and control.

Project Description

Autofarm is part of the pitched project Terrafarm, which describes its goals as such:

"Autofarm is intended to completely disrupt the food supply chain by introducing 21st century information technology to agricultural production. This will eliminate substantial food waste, reduce environmental degradation, improve produce freshness and nutritional content, increase food security and accessibility, slow the process of climate change, and make cities more sustainable and self-sufficient. Imagine an application that fulfills this purpose while enabling stores to easily grow their own food, saving them money, attracting customers, and eliminating supply issues. This application, Autofarm, will operate tiny vertical farms that will autonomously grow fresh, nutritious produce for food businesses such as grocery stores and restaurants."

The Autofarm web application will provide Terrafarm customers with a powerful and easy-to-use interface for monitoring and controlling their Terrafarm units. The application will provide data, progress, and alerts regarding the user's Terrafarm modules, and connect to the cloud to share data with other modules.

Due to the size and ambition of Autofarm, our group will be working in cooperation with other groups who will be handling the creation of a mobile application and a machine learning element.

Project Milestones

First Semester

- 1. Plan design of application with Terrafarm leaders
- 2. Choose technology stack
- 3. Create alpha build
- 4. Create build tests

Second Semester

- 1. Create beta build
- 2. Integrate with other Autofarm projects
- 3. Create final build

Project Budget

The only cost for our project will be whatever cost is associated with hosting the site, which won't be determined until later in the project.

Work Plan

Since the project is currently in its early planning stages, clear roles have not yet been defined. Meetings with Terrafarm leadership in the coming weeks should help us outline our plan, but all of our team members have varying levels of prior experience with web development and so should be able to contribute to the design and implementation of our web application. One role that will likely need to be filled is a team liaison to the Terrafarm owners, and another liaison to the other Autofarm groups (though this could be the same person).