Computer Science
Senior Design Laboratory

University of Kansas

Terrafarm Web (Team 16)

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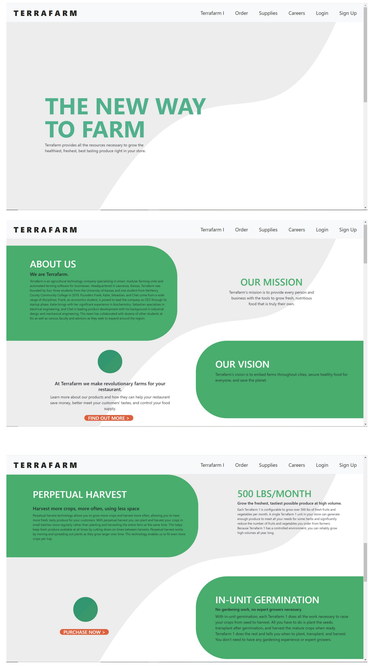
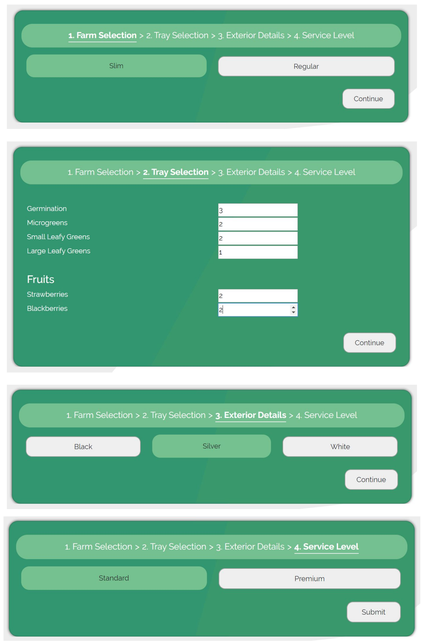
Description & Purpose

- Terrafarm Web acts as a powerful and easy-to-use interface for Terrafarm clients to monitor and control their Terrafarm units.
- It will provide data, progress, and alerts regarding the user's Terrafarm modules, and connect to the cloud to share data with other modules.
- The site will also be used to advertise the modules and information about the company, and will be used to order modules and supplies.

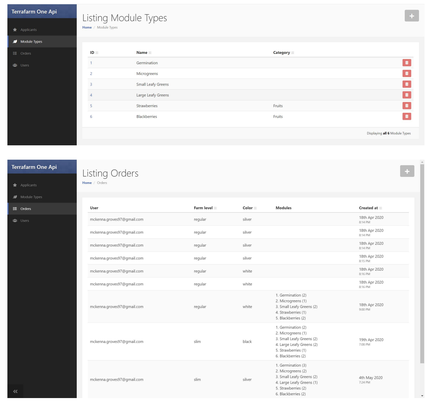
Landing and Information Pages



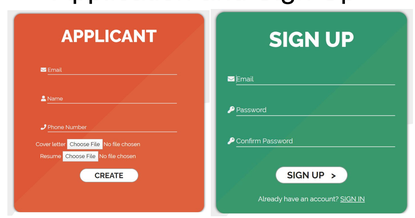
Ordering System



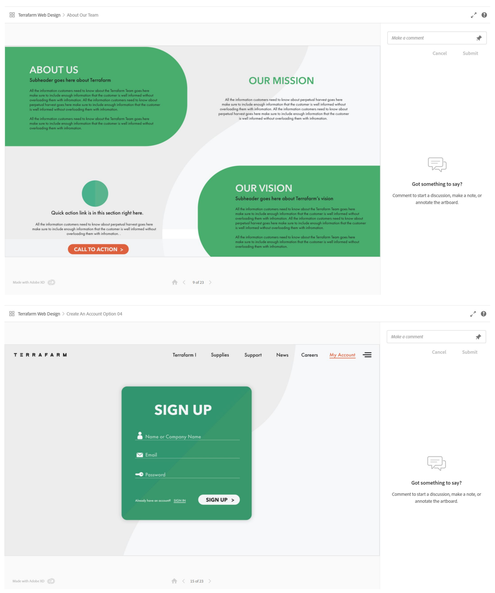
Admin Page



Application and Sign Up



Design



- For the design of the website, we were given mockups that a design student made with Adobe Xd.
- Some of the pages had multiple mockups, so there were a few minor design choices that were left up to us.
- The text for the website was provided by our contact with the Terrafarm company, Frank Luse.
- To implement the designs we used a Ruby on Rails application, along with basic Haml and CSS.
- A few databases were required for storing applications and orders, which were implemented with Postgresql.

Ethical & Intellectual Property Issues

Ethical Issues

- Large-scale adoption of Terrafarm technology could help reduce some of the negative impacts of climate change, topsoil degradation, and promote sustainable farming practices.
- The widespread growth of the automated farming industry could potentially hurt traditional farmers.
- This technology could help provide access to fresh produce to people who don't have it currently.

IP Issues

- A number of open-source software packages were utilized in the development of this project, so we had to ensure that we were in compliance with their licenses.