

Team Number:

011-1

Team Name:

Team Plants

Team Members

- Davion Hochhalter
- Ian Kyle
- Felix Conant
- Maya Williams
- Mathias Teferra

Application Name

Verdant

Application Description

Our application will allow plant enthusiasts to log their own plants, as well as tracking where the plant was found. Users may be able to upload photos, descriptions, and names of the plants they have found and will be entered in a database. Users can then query/ filter through their findings to look back on plants logged, utilizing a search. When logging plants, users will be able to choose which feature they want to upload (though they will need something that allows for identification from the query, this will be chosen once the database is made).

This application will be useful for users who wish to track their findings and locations for plants. Also, an interactive database for users allows for easier plant identification, using descriptions or names. This application should be user friendly and the interactive map provides an interesting feature to keep users engaged.

Audience

The application will attract those interested in plants, but it should be accessible to both experts and those with minimal knowledge of plants. An ideal user provides as much information as necessary for plant classification in the database (image, name, description), but

not all of these may be required. Certain information may be required in order to make it plausible to classify / identify certain plants, so minimal knowledge is useful.

Vision Statement

For plant lovers, who want to track interesting plants they encounter in the wild. Verdant is an app that allows people to log and locate plants. Unlike the Colorado Native Plant Database, our product will allow users to input images of the plants they encounter and specific locations.

Version Control

[Github repository](#)

Development Methodology

We are going to use an agile methodology with regular meetings, and track progress via a Kanban trello board. We will also be communicating over Discord and setting weekly/daily goals there.

Communication Plan

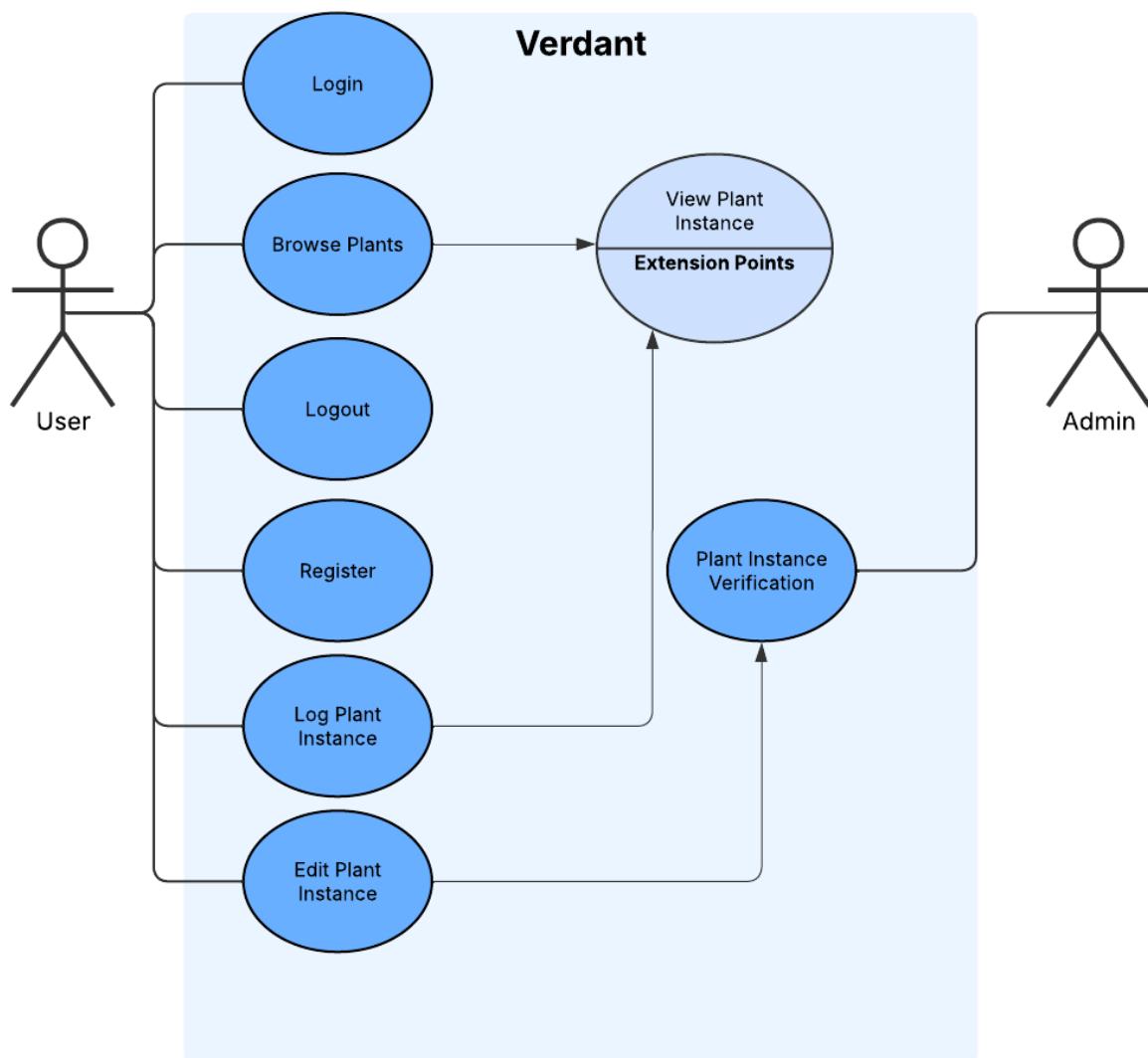
Communication will happen primarily through a dedicated Discord server.

Meeting Plan

Group Meetings: TBD

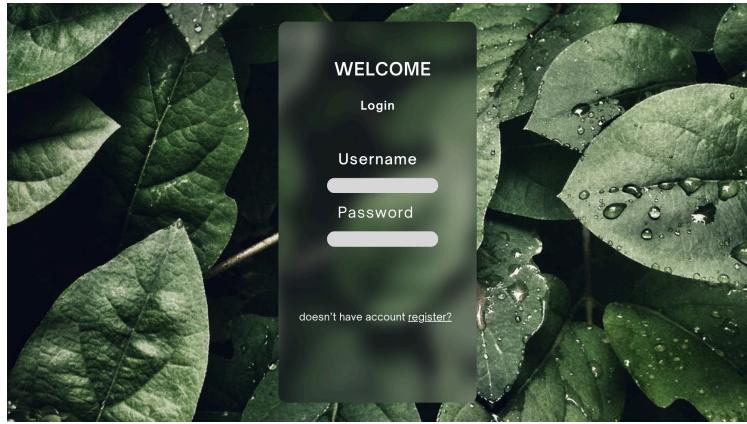
TA Meetings: Wednesdays at 12:45 - 1:00 PM

Use Case Diagram

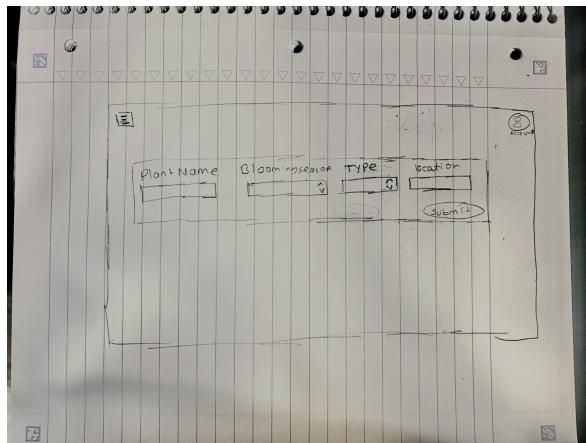


Wireframes

Login



Search



Register

Home VERDANT Account

Create Account

create Username

create Password

Verify password

Already have account?

This is a hand-drawn wireframe of a 'Create Account' form. It features a header with 'Home', 'VERDANT', and 'Account' buttons. Below this is a large rectangular input field divided into three horizontal sections: 'create Username', 'create Password', and 'Verify password'. At the bottom right of the input field is a question 'Already have account?' followed by a button labeled 'Login'.

Profile

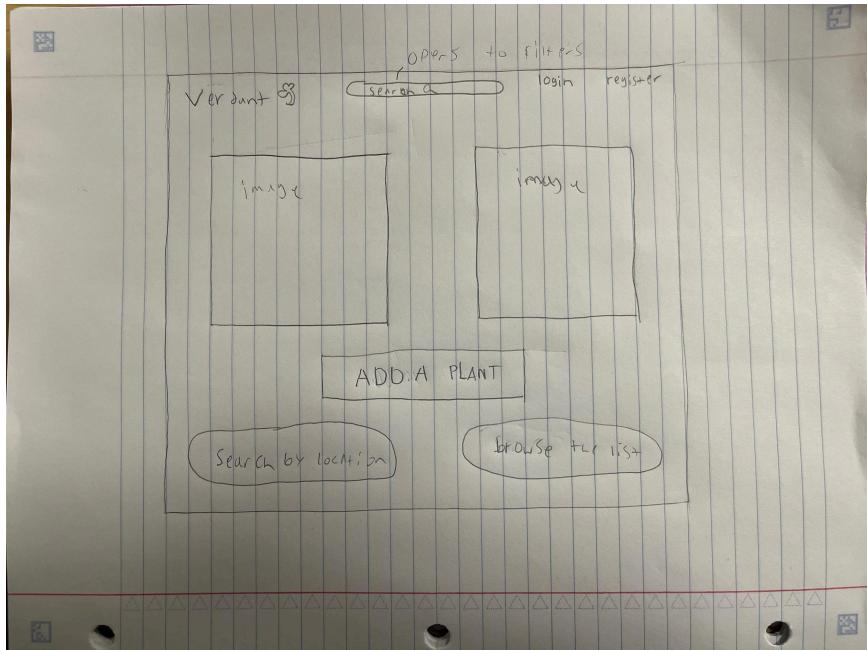
Home VERDANT Account

Image

Username

This is a hand-drawn wireframe of a 'Profile' page. It has a header with 'Home', 'VERDANT', and 'Account' buttons. Below the header is a large circular input field labeled 'Image'. Underneath it is a text input field labeled 'Username'. At the bottom is a button labeled 'View log'.

Home page



Log/edit plant instance

Common name:

Scientific name:

Location:

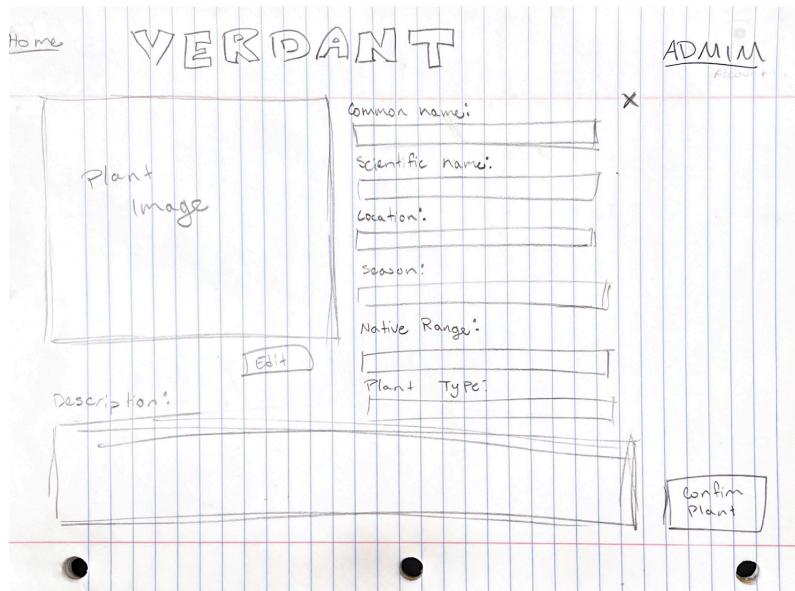
Season:

Native Range:

Plant Type:

Description:

Admin Confirmation



Extra Credit:

1. Misidentification within the database, this could potentially lead to misleading/ incorrect information given to the user. A mitigation strategy may be to allow the user themselves or other users to have some indication of incorrect information. We would need to figure out a way to allow edits, without everyone changing the data.
2. Data loss/corruption is a high-risk issue that could arise during the development process. Version control and regular testing will mitigate this.
3. This project could suffer from scalability issues given the size of the team and limited time frame. We need to include features that are attractive to users, such as our enhanced search bar. This is a low risk issue considering the nature of the project.
4. Security is an issue with almost every web app, this is a high risk issue. Good hashing, encryption, and ensuring we never send sensitive information through requests is vital. Also input sanitization to prevent SQL injection.
5. Performance, if we get too many entries the application could easily start to run slowly and could become unresponsive. Medium risk, optimizing database queries is incredibly important. Caching could potentially be useful as well.