

Title: 4est: a Plant Observation Journal

Executive Summary:

This API will be part of a larger project to build an interactive, educational app. The goal of this assignment will be to build an API which assists in building and maintaining the journal database for the larger app. The primary function of this API will be the addition and modification of plants and their observed features and locations to take notes of plant observations for plant identification and taxonomy. The initial Entities will be users, entries, plants, and locations. A user will have access to their "Journal", the database of entries, plants and locations. They can search by location, or plant name to view the objects and their associated entries. They can additionally fill out additional entries which will add or update existing locations and plants. For simplicity, each entry may only consist of one plant and one location.

Initial Features:

Create a bulleted list of planned features you plan to have completed in your project by the deadline. This should include a list of API endpoints for each feature. If you are working in a group, please note which team member will be assigned to each feature.

Entities: Entries, Dates, Locations, Plants (Species and specific instances)

A User can perform the following operations:

Create/POST

- Create New Entry (POST in Entries, PUT/POST in plants and locations)
 - o Create New Plant (POST in plants)
 - o Create New Location (POST in locations)

Read/GET

- Browse previous entries (GET on Entries)
- Browse entries by location (GET on Locations)
- View all details about a specific Plant (GET on Plants)

Update/PUT

- Update a Plant (Put on Plants)
- Update a Location (PUT on Locations)

Delete

- Delete an Entry

Stretch Goals (to be completed if time allows, or after graduation):

Create a bulleted list of planned features you plan to have once you have completed your initial features. These should be features that may require more research in how to implement or features that would take longer than the allotted time frame.

Add Images to plants

Add Users

Break down plant attributes into their own tables/objects (Stages of growth, Branch/leaf and fruit/flower layout, medicinal value, edibility, etc)

Add latitude/longitude and map pins to locations

Allow users to read the journal entries of other users

Find and associate a validation DB that can confirm/verify plants by features and location

Make the app android/iphone compatible

Create a trivia game that draws from the DB