|  |  |
| --- | --- |
| Project Proposal  SIT120 - Introduction to responsive web apps Assignment 1 | Botanical forum and garden manager  CAMERON JOHN HART  220241209 |

# Summary

## Building global and local forums for gardeners

My product is a site for gardeners and farmers aimed at helping them grow plants, from backyard to massive farm. Most already available products offer one of a few service, garden journals / mapping, plant identification or a community forum. The idea of this app will be to combine all those features into a single site.

To help link all these parts this site will maintain or partner with a database of known plants and how to raise them, from preferable soil types to fertilizer to sun exposure. This database will make garden planning and plant identification quite easy. A user will simply need to add the plant and the region they are in (alternatively the climate of their region) and the site will recommend amounts of water and type of care to give to plants.

Users will be able to share or invite other users to view these journals, which links in well with the social aspect. Users will be able to subscribe to and filter their feeds via groups and tags. Users can use their local area tag to find threads or groups of other gardeners in their areas, allowing a fast and easy building of gardening communities.

My site will also provide a new garden planning tool, that user can use to plot out an area in a garden and plan what plants to grow there.

## Assets

|  |  |  |
| --- | --- | --- |
| **Asset** | **Use** | **File Type** |
| Index.html | The first page that is loaded on entering the site | HTML |
| Style.css | A style guide that will be used throughout all the pages | CSS with styles used over multiple pages |
| {focused}.css | Css stylsheets for components that aren’t always present, the focused will be replaced with the vue’s name | CSS |
| AppScript.js | A javascript with lots of generic functions used throughout pages | JAVASCRIPT |
| Login.vue | A component that manages logging in | VUE |
| ProfileHome.vue | A view that contains the garden manager view and forum view components | VUE |
| ProfileGardenManager.vue | A view page for creating a garden plan or managing a Garden journal | VUE |
| ProfileForum.vue | A view page focused on the forum | VUE |
| ForumCatagory.vue | A catgory button that manages the forums shown on the profile, forum view | VUE |
| Pswitch.vue | A switch used on profile page to swap between forum and garden views | VUE |
| SearchExpanded.vue | A component that replaces the search button with an input field | VUE |
| ForumPost.vue | A post that will display in the forum fields | VUE |
| GardenJournal.vue | An area where the garden journal can be interacted with | VUE |
| GardenPlan.vue | An area to view a garden plan | VUE |
| DedicatedSearch.vue | A larger page for the Forum that will show results for the search | VUE |
| DedicatedPlanner.vue | A larger page for the garden planner that will add some extra functionality to the planner | VUE |
| DedicatedJournal.vue | A larger page for the garden journal that will add some extra functionality to the journal | VUE |

## Component explanation

The navigation of the site Will look like this diagram: Diagram

Description automatically generated

In a users profile they will have 2 tabs, gardening and social, which will be controlled by the Pswitch component. It will use the ProfileForum and ProfileGardenManager.vue as views to do so.  
gardening will contain a plant Journal and Garden Planner, the combined view will have limited functionality for each of these components, the dedicated page will have full / added functionality.

For the social tab, there will be a search bar and feeds for three different categories: Users threads (so what the user has posted), Group threads (trending threads in the users groups), and a global feed for what’s trending on the site. The three threads will use the thread post component post to display data fed from lists (like title, text)

Using the search bar will take the user to a dedicated Forum Search page. This search page will also use the thread post component to display threads, the dedicated page will give more space for the thread posts to use.

The profile page will need to be able to switch between gardening and social tabs.

The plant journal will need to use data from the garden planter to auto populate certain the journal. This journal will share data and functionality with the dedicated journal page. The Journal will use data fed into Journal entry components to populate a variable length list.

# Purpose

## Target Audience

My site will target gardeners, with my main demographic being homeowners with backyards, so ages 30+.

My site will be open to anyone that grows plants and will aim to attract both new and experienced gardeners. The site will be accessible by non tech savvy audiences as I feel the older demographics that are generally less technologically literate will be a large target audience.

## Creativity demonstration

### Interactive planning and visualization tools

Using interactive features, the site will provide a garden planning tool that allows users to design mock versions of their gardens. These plans will allow users to work of exact numbers or just general shapes. Ideally garden beds made with precise measurements will allow the site to auto suggest how many of a certain product the user will need (x amount of seeds) This planning tool will also have mock visualizations of the plants grown, to show users an example of how their garden might appear.

### Growing a centralized gardening community

With the addition of a forum to the site, we can grow a community focused on gardening. In these threads people can show off gardens, ask more experienced gardeners for help or discuss their gardening experiences. We will add features to the site that are helpful too gardeners new and old (like a plant encyclopedia).

### Intuitive and simple design

We will emphasize a system that is easy to use for anyone to help grow our target audience and user base. Using simplified controls, like dynamic tags when searching to reduce the amount of options available, or combining features into relevant pages to reduce the amount of navigation required.

## User Stories

##### Epic

As a user I want a site to help me manage when and how to take care of the plants in my garden or around the house. I want tools to help me plan how to layout my garden; giving me an idea of how it might look. I want the ability to ask other gardeners opinions on questions I might have, and I want to join some gardening groups where I can chat with gardeners that share my interests.

##### User Stories

|  |  |  |
| --- | --- | --- |
| User Story | Sub-stories | Components |
| As a user I want a site to help me manage the care of my plants | * Garden journal to record care given * Recommend care based on plant type, location etc. | * ProfileGardenManager.vue * GardenJournal.vue * DedicatedJournal.vue |
| As a user I want planning tools that also visualize my garden | * Garden planner that can easily sketch a gardens shape and calculate available space. * 2d or 3d models with varying colors based on the selected plants | * ProfileGardenManager.vue * GardenPlanner.vue * DedicatedPlanner.vue |
| As a user I want to ask other gardeners about questions that are bothering me | * A forum space with the ability to add question threads * Being able to search the forum for similar questions | * ProfileForum.vue * DedicatedSearch.vue * ExpandedSearch.vue |
| As a user I want to chat with other users that share my gardening interests | * Public and private gardening groups that use the forum style * The ability to search for public groups | * ProfileForum.vue * DedicatedSearch.vue * ExpandedSearch.vue |

# Systems and Design

## UI / UX

I believe a minimalist approach will help prevent my site from appearing too complicated and feel more inviting for users.

As such I will implement a simple 1 colour palette, with varying grades of opacity for the different elements:

#CEB7DE

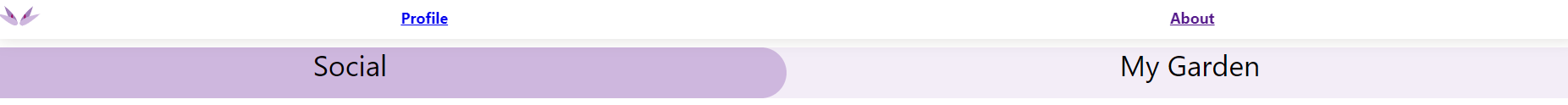
My Main background color will be white, with purple and faded purple representing active or inactive elements respectively. As seen in this mock up below, the Social tab is active, the search bar is inactive (not being used) and all three threads are active. By only using one main colour and varying it’s opacity we can create an easy to use interface that is easy on the eyes.

Graphical user interface

Description automatically generated

## Components

##### Profile Home



This switch will be responsible for changing between the social and gardening views within the project page, it does this with the help of vue router.

##### Forum Search

A picture containing graphical user interface

Description automatically generatedThe forum search on both the Full forum and the Lite forum page (the one shown in the previous image) Will utilize a tag system with dynamic tags to help filter searches.

This is the searchExpanded.vue object, the space where the example filters a will be filled with usable tags, checkboxes and fine-tuning parameters.

##### Plant Journal

Graphical user interface, text, application, email

Description automatically generatedThe plant journal will be a basic weekly calendar, that recommends care to give plants entered into the journal, e.g. Move into the sun for (x) hours, give around (x) amount water.

This will be the purpose of the GardenJournal.vue, users should be able to enter in their own data and have some generated by the gardenPlan.vue

##### Plant Plotting

The plant plotting will let you drag shapes, specifying their dimensions. Users will then be able to divide up these plots into different plant types (searched from a plant datatabase).

A picture containing graphical user interface

Description automatically generated Depending on the type of plant (flower, tree, bush, shrub) the planner will generate a small visual representation of that plant on the plan.

## Larger System Summary

## User experience

## Diagram Description automatically generated

After logging in a user can use versions of gardening tools and forums with limited functionality.

A user can navigate to the dedicated pages to use these components full functionality.

Access to the about us and home page are not gated by the login component, a user can access these without any account.

## Page Hierarchy

Diagram

Description automatically generated

This Is an outlook of the systems hierarchy and navigation, my website has mostly three layers, the app layer, which includes a header and routing to the profile, home page and about us pages.

The main view, which contains content for the profile, home and about us pages.

And Finally the Profile view, which gives access to the profile social and garden views, along with the dedicated search, plant journal and garden planner pages, these are all within the profile page as a user will need to log in for their data for each of these components to be read / saved through props.

## Project Timeline

My timeline spans 5 weeks.

I will use one week developing the main profile page, forum and plant journal. I have allocated two weeks to the plant planner as this will be the most difficult compononet to devlop.

## Feasibility

My Current timeline allows for some extra time on the main Profile, in case I get stuck implementing the login functionality for the main profile page. I believe I will complete the Planner component faster than the assigned time (of two weeks) which will give me more time to spend on other aspects of the site.