# Description

My website is designed to be a social site for gardeners, offering tools like daily plant journals and garden planners, along with forums. The target audience are adults, aged mostly 30 +.

The website was built using Vue 3, Vue router and Vuex, most of the code consists of JavaScript, with the rest being CSS and HTML using the VsCode editor.

# Challenges

Storing data Was a bigger challenge then I originally thought it would be. I ended up using Vuex to store data that needed to be saved between sessions or accessible through different views and in the router. Originally, I thought .TXT files could be used to save values between sessions, however that isn’t the case, I would need to run some for of database + server combo to achieve such results (Which I cannot do with my current skillset).

I also set up too much for myself to complete, I overestimated my abilities and time so some aspects of my website are unfinished or unpolished.

# Deviations

Functions I had am pushing to the next development phase are:

* 3D garden plan, originally I wanted to learn OpenGL and implement that in my site, I mostly ran out of time to do that however.
* Tags for posts, while the txt file used to populate posts does have a tags section, they are not used in the search and cannot be assigned
* Adding New Posts, Replies can be added, but not posts, this is mainly due to the lack of my ability to store either permanently

# Current Functions

## Login and page navigation

Graphical user interface, application

Description automatically generated

Users are given a authentication token (their username reversed) which allows them to log in. On logging in the users Username is used as part of the Url as a parameter, if the user tries to access a path that requires a login, and they are not logged in, the path they attempted to navigate to is sent to the login page as a query. Currently The only user is: Username – Cameron, Password – LOL.

## Forum with Search Bar

Although I couldn’t implement some of the advanced forum features that I wanted to, my website has searching functionality that compares the query against the title and content of Posts.

Graphical user interface, application

Description automatically generated

Additionally the search text is saved in the URL as a query, which allows redirection from the profile page and returning from posts to send the user to the forum page with the relevant search filter applied.

## Plant Database

A .TXT file is currently standing in as a plant database, this file contains instructions for plants, along with a color, and their name. These features are used in the Garden Planner and Journal Features.

Graphical user interface

Description automatically generated with medium confidence

Chart

Description automatically generated

## Drawing Garden Plans

I use the HTML5 feature, canvas, to allow users to draw and edit Mock ups for gardens. Originally I wanted to allow users to create custom size canvases, and to view a 3D version of their plan, however such features have been moved to the next phase of development.

I have 3 tools, Draw select and delete and the colours represent a different flower (purple – lily, yellow – sunflower, red - rose)

Changes are automatically saved and the plans are visible on the combined garden page

## Garden journals

I have functionality to generate Journals from created garden plans, or new original Journals. These Journals allow users to set up daily tasks that repeat (weekly) for their gardens.

Graphical user interface, text, application, email

Description automatically generatedGraphical user interface, text, application, chat or text message

Description automatically generatedWhen generating from a Garden Plan, The journal will automatically add the recommended care for plants in the plan to the journal.

A picture containing chart

Description automatically generated

## Combined Garden Page

Shows a combination of selected garden Journal and plan, for the garden journal only todays relevant activities are shown.

## Text Description automatically generatedCoding concepts / plugins

Conditional rendering: v – if

I use v-If to hide components that shouldn’t function as they try to access variables that don’t exist,. I also use v-if to hide functions that are rarely rendered (v-show is used when they need to be toggled a more commonly)

To the left I use v-if on Plan selector and the textbox that holds the plans name, as if there are no plans these modules will try to access undefined values which causes errors, conversely I only hide the planner tool main section with v-show as the cnavs contained in it is needed during mount and creation.

A screenshot of a computer

Description automatically generated with medium confidence

## List Rendering

Most of my select boxes will use v-for to rendering a dynamic list, allowing more control over what values can be selected.

In this example I use v-for to render an array of buttons, of which I get from a Plant list computed property which filters out any plants that are already in that day of the journal.

Graphical user interface, application

Description automatically generated

## Plugins – Router queries and authentication

I manage all my router / navigation in the index.js file. Here I specify paths, navigation guard (checking if a page needs Authorization and redirecting to login if no valid token).

Text

Description automatically generatedBelow is the authentication guard, which will redirect to login if the users token is invalid. It also sends the indented path as a query to the login page.

## Text Description automatically generatedVuex – storing data in session and between views / pages

I use Vuex for storing data, or “states” between components, views and other single file pages. It also allowed me to store data in a session, so refreshing the page wuldnt get rid of all the data (although closing and re-entering the page will).

I also use mutations and getters / setters to manage data in the separate stores. Modules are used within this file to let me organize the data better and specify what should be saved to session and what shouldn’t.

## Props, Components and Recursion.

Text

Description automatically generatedI use props and components quite often throughout my website, with around 8 different components. My favorite being the Reply Component. This Component actually uses recursion on itself to render nested replies

Meaning all I need to do is create one instance of this in my post page, and it will automaticly render/ create components for every reply asccosiated with the post.

## CSS breakpoints

Text

Description automatically generatedI tried to avoid breakpoints, having only one major breakpoint size in my website (at 650px) to prevent most of my data from overlapping. This can be seen in the Combined garden page for the profile, where the slider turns vertical (instead of horizontal).

Chart

Description automatically generated with medium confidenceA picture containing graphical user interface

Description automatically generated