

CVWO Final Assignment Write Up

How I feel about my accomplishments.

I feel very proud of the application I created. I think it's a well-done website that I can use in my daily life as a student. The feature I am most proud of is the online subscription calendar. It allows me to bring the tasks from the app to any device I own, giving the software greater versatility and usability. The calendar subscription system backend was designed and developed by me in 2020 when I couldn't find a free API that allowed me to create calendars. I was a beginner to NodeJS and APIs when I first wrote the code in 2020; revisiting it in 2022 made me realise how much I've learned in 2 years.

This isn't my first time creating a web application with a RESTful API architecture. Currently, in my CCA at GDSC NUS (Google Developer Students Club), I work on a similar resource management system for an NGO 'Diabetes Singapore'. Therefore, despite Ruby on Rails being a completely new language for me to learn, it felt comfortable and familiar to develop database models, controllers, and middlewares. I was surprised to learn that Ruby on Rails has a built-in Object Relational Mapping (ORM) called Active Record and was appreciative of being able to work with PostgreSQL without writing any SQL.

I've had experience building frontend static websites before; however, this was my first time building a 'Single Page Application' (SPA) with React. I am part of the backend team in GDSC; hence, I didn't have much exposure to working with the frontend till now. I watched a Udemy course over the winter break and built the application based on the principles I learned from his tutorials. I am proud of what I learned and created in a short period. I think the UI is elegant and welcoming. However, I know that the code quality of my frontend can be improved drastically with, for example, custom API hooks and API services to further modularise my code to more closely adhere to the 'Don't Repeat Yourself' (DRY) principles.

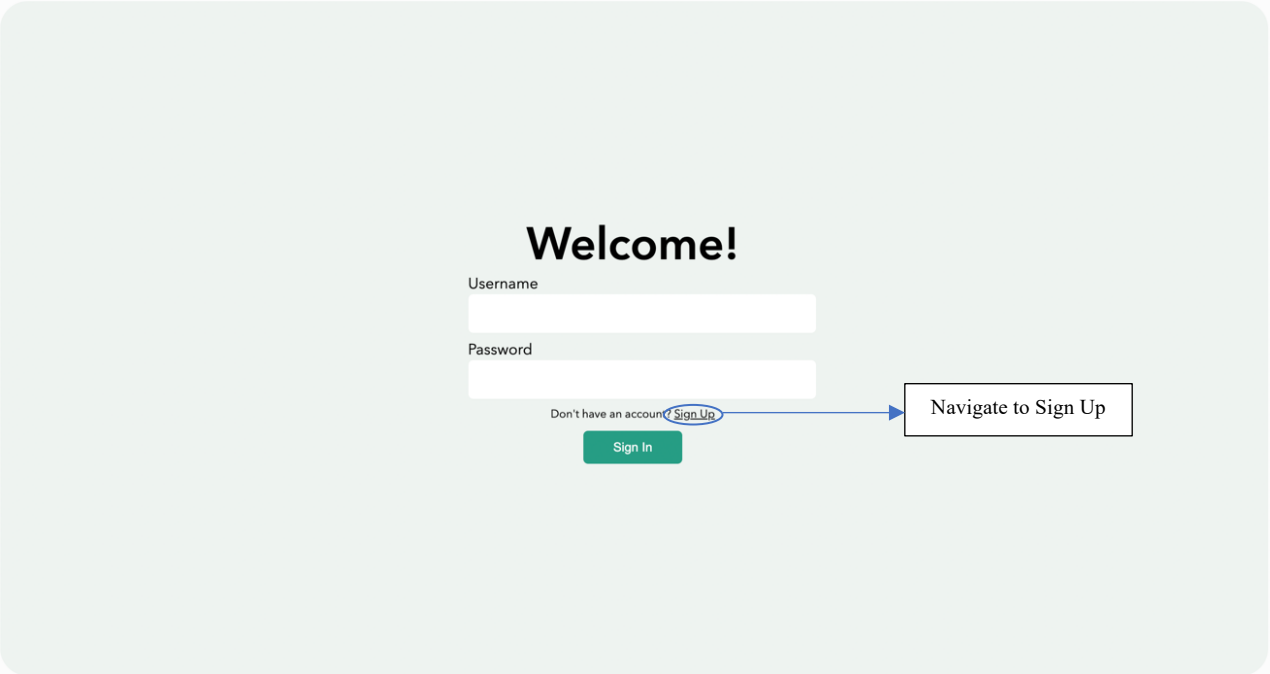
Although I am happy with what I accomplished during the winter break, I know there is still a lot to learn. My current application is not mobile responsive. This was because I didn't use any CSS libraries such as Material UI, Tailwind CSS etc. thus, changing my application to be mobile responsive would be tedious. If I were to build the application again, I would do so with a CSS library. Moreover, I used the default JavaScript 'Fetch API' to handle requests; while this is a good solution, adopting a library such as 'Axios' would give my program greater versatility. Lastly, from the feedback I received from an initial beta test, I would like to

Cui Shen Yi (A0235323N)

implement a drag and drop system such that it's easier to sort and move tasks between the different states.

User Documentation (<https://laughing-bassi-1b3575.netlify.app/>)

Authentication



Welcome!

Username

Password

Don't have an account? [Sign Up](#)

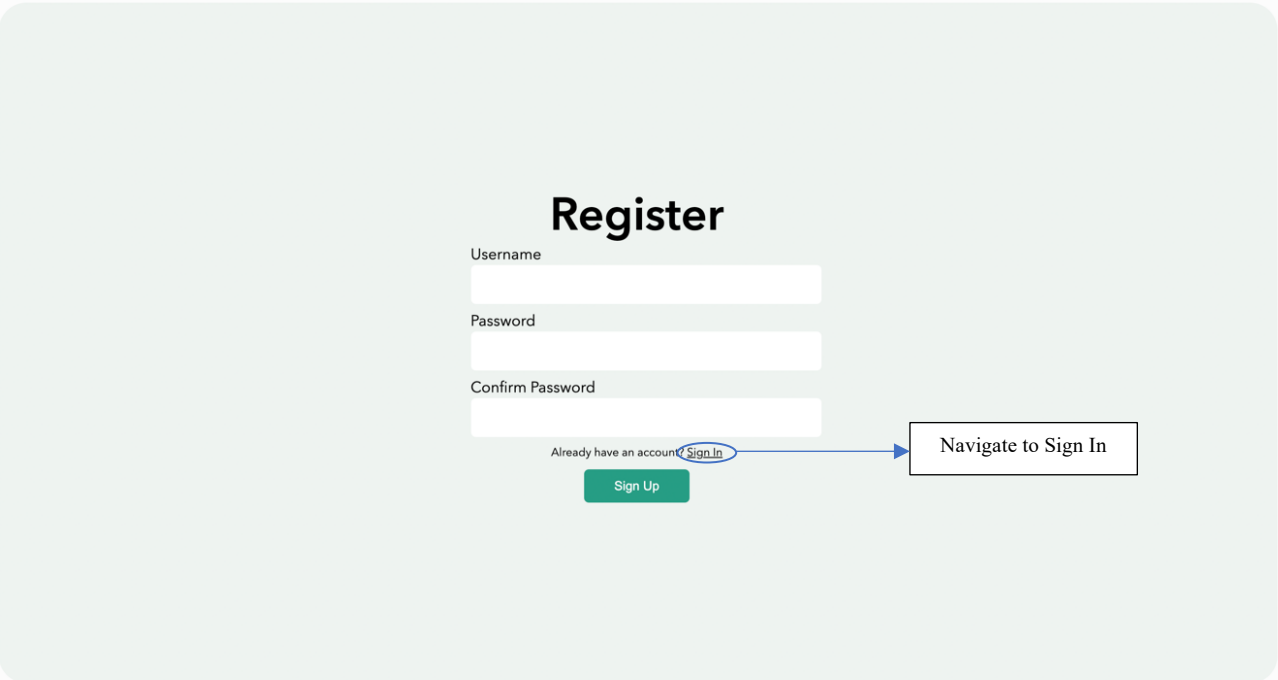
Navigate to Sign Up

The image shows a login form titled 'Welcome!'. It has two input fields for 'Username' and 'Password'. Below the password field is a link 'Sign Up' circled in blue, with an arrow pointing to a box labeled 'Navigate to Sign Up'. There is also a green 'Sign In' button.

Test users may use this credential:

Username: testUser1

Password: 88888888



Register

Username

Password

Confirm Password

Already have an account? [Sign In](#)

Navigate to Sign In

The image shows a registration form titled 'Register'. It has three input fields: 'Username', 'Password', and 'Confirm Password'. Below the 'Confirm Password' field is a link 'Sign In' circled in blue, with an arrow pointing to a box labeled 'Navigate to Sign In'. There is also a green 'Sign Up' button.

Add, Edit and Delete Tasks

