

CVWO Final Submission Write-Up 2022

Particulars

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Deployment: <https://symphonious-dango-f8e9aa.netlify.app/>

Reflections

Though I was fairly comfortable with frontend development and React, I have never worked with backend frameworks such as Ruby on Rails. Hence, I felt that this assignment was a perfect way to practice developing a full-stack web application to pick up these new skills and frameworks.

Initially, I needed clarification about integrating my frontend with Ruby on Rails. Most YouTube tutorials online covered using the MVC's Views to generate webpages, which was not what I wanted. Hence, it was only through more Googling that I discovered I had to develop an API-only Rails application, which my front end would make requests to. Hence, I read the Rails online documentation to familiarise myself with the concepts of the MVC model and how to connect the dots in the application. Thus, doing this project was an enriching experience in learning about full-stack development.

Deployment

Deploying the frontend to Netlify was a fairly smooth experience. However, I encountered a few problems deploying the backend to Render. My backend deployment could not decode the JWT tokens in the HTTP-Only cookies stored on the client side. Thus, I had to change my authentication method to JWT tokens stored in LocalStorage.

The deployment experience taught me a lot about security concerns and how one should dedicate more time to deploying code onto servers. I managed to resolve my issues and hone my development skills through troubleshooting.

Code Quality

I did my best to format and structure my code correctly. I utilised Prettier and ESLint to ensure consistent code formatting across all the files while styling import statements. For the frontend, I abstracted the various TSX files into file structures that represented their purposes. I also used TypeScript to ensure strong typing across all my React components, especially when props were being passed around. I also utilised Redux to prevent long props chains and maintain a single source state for various functionalities in the application. For the backend, I followed the same format as the files generated by the various Rails commands.

I also learnt more about source control using Git. I learnt how to write more meaningful commit messages, resolve various merge conflicts when working on the project or revert to a previous commit should anything break.

In the future, I would want to learn more about test-driven development, where I would write test cases to test my code before pushing it for deployment. Doing so would reduce the need for cumbersome testing across multiple browsers and windows.

UI/UX and Accessibility

I strived for a clean and minimalistic design when building my application, which I would find intuitive and easy for users to use. I enjoyed going through the design process while planning how the various features should be implemented.

I also learnt about accessibility and how important it was to make applications that people with different needs could use. I learnt that not everyone can interact with my application visually and may do it through other mediums, such as screen readers. Hence, this is an area that I would definitely want to improve on in the future.

Possible Features

There were a few features that I could have managed to implement. One would be a dark mode for the application, as it is something I prefer. I also did not implement a thread/comment count that can be viewed on the various pages. I realised I needed more time as Semester 2 started. Thus, I prioritised developing the key features, such as the CRUD functionality of the threads/comments.

In the future, I would set a more realistic timeline and various goals to meet. I would not underestimate that tasks such as deployment require additional time to troubleshoot and get it right. Even though I compromised on various features, the final application is still something I am proud of.

Summary

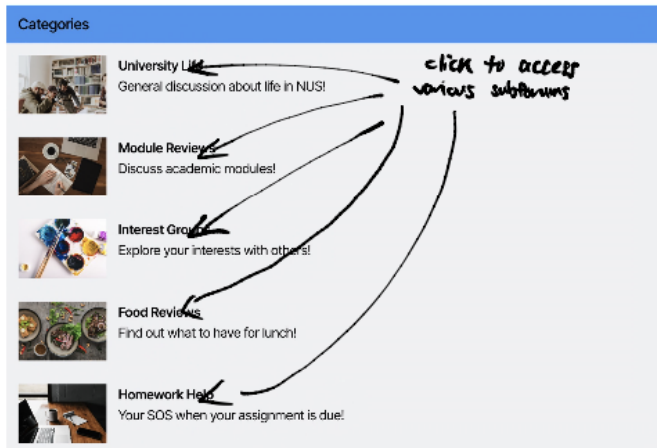
This assignment was a great learning experience for me to learn full-stack web development. It was my first time creating a full-stack application, and I'm proud that I managed to deploy the final product. I learnt that Googling is an indispensable skill in software engineering, as I have resolved 99.9% of my problems scouring through StackOverflow and other forums. Despite the various setbacks, I have developed something I'm proud of.

User Manual

Access Forum Categories

The Soccat Forum

A place for wholesome banter!



Thread CRUD

University Life

General discussion about life in NUS!

Home > University Life

Thread

Education Resource Center!!!
by rayner1x Jan 25, 2023

New Thread

Title

Title

Content

Content

Submit

Comment CRUD

Home > University Life > Education Resource Center!!!

Education Resource Center!!!

Jan 25, 2023, 3:53:49 PM



This is an amazing place to study! :D:D:D

Jan 25, 2023, 3:59:24 PM



I should visit there soon! :D

New Comment

Type your own comment here!

Submit

Jan 25, 2023, 5:02:01 PM



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Breadcrumb Navigation Bar

direct
to Home

redirect
to subforum

current
thread

Home > University Life > Education Resource Center!!!