CVWO Final Submission

Lim Koon Kiat A0196583M

App on Heroku: https://shielded-island-88433.herokuapp.com/

User Manual

User Accounts

1. This app requires a user account to use. On the homepage, sign up if you are a new user, or log in if you are an existing user.
2. To log out, click 'Log Out' on the navigation bar.

Tasks

1. All your existing tasks can be seen in the tasks page, which can be accessed by clicking 'Tasks' on the navigation bar, or clicking 'View Tasks' on the homepage.
2. To add a new task, click either the 'Add Task' button on the navigation bar, or click 'Add New Task' on the tasks page.
3. Each task has a name, description, date, completion status and its tags. Name and date must be specified.
4. To edit the fields of a task, locate the task in the tasks table, and click 'Edit'.
5. To toggle the completion status of a task, click the 'Completed'/'Incomplete' button in the status column of the tasks table.
6. To delete a task, locate the task in the tasks table, and click 'Delete'.
7. To search for a task by its name, description or tags, use the search bar in the navigation bar. All tasks that match the query, even if not exact, will be found.

Tags

1. Each task can be tagged by multiple tags as a way to catagorise them. To view all your tags, click 'Tags' on the navigation bar, or click 'View Tags' on the homepage.
2. To add a new tag, click either the 'Add Tag' button on the navigation bar, or click 'Add New Tag' on the tags page.
3. Once a tag is created, tasks can be created or edited to contain the tag.
4. To view all tasks with a specific tag, locate the tag on the tags page, and click 'View Tasks'.
5. To edit a tag, locate the tag on the tags page, and click 'Edit'.
6. To delete a tag, locate the tag on the tags page, and click 'Delete'.

Challenges and Accomplishments

Integrating React into what was once a fully Ruby on Rails app proved to be a greater challenge than I initially thought it to be. Before using React, I wanted to make sure that I could make an app with all the minimum features that I wanted, and then convert the views portion of the app to React directly. However, I soon realised that it was not so clear cut, and I had unintentionally boxed myself in by just using Ruby on Rails. Following a different design methodology, using React means a large overhaul of everything I had built up to that point. Many of the things that I thought were easy to do in the original Ruby on Rails app became harder to implement from scratch in React. There were also not many Ruby on Rails with React tutorials that I could find online, thus exacerbating the challenge I faced. Many hours were spent arduously trying and failing to get React to replicate the same features I once had. For example, I used the Devise gem to handle user accounts before trying to add React. However, it seems that Devise works best on apps built purely with Ruby on Rails. Combining Devise and React to replicate the same user accounts functionality took many tries before I could figure out how to do it.

Hosting the app on Heroku also proved to be another big challenge. For some reason, updating the version number of a dependency completely crashed my app on Heroku, and could not be recovered even after reverting all my code to the previous versions. After trying and failing to see what was causing it to fail, I decided to make another Heroku app, which somehow worked again. If I have time in the future, I think I might come back to figure out what was wrong in this situation.

Due to the excessive amount of time I spent trying to figure out and troubleshoot the various problems I encountered after the mid assignment submission, and also due to new academic commitments, I could not create an app that matches what I initially envisioned it to be. Many features that I would like to add could not be added on time, and I had to resize my expectations. Still, from zero knowledge of web development, I am proud to create my first working Ruby on Rails with React app and host it online. Using Bootstrap, I think I also managed to create a decent looking app. While it cannot match the more comprehensive and sleeker task apps out there, I think it is still a usable and feasible alternative that I can consider using. I learnt a lot from figuring out how to overcome the various challenges I faced in the development of this app, and these experiences developed my understanding of how web development is like. If I have time in the future, I would like to revisit this project to add more functionalities and further refine it.