CVWO Final Write-up

See Toh Jin Wei A0233308M

Through working on this assignment, I learnt a great amount on how to better structure and plan a project, and how to build a full-stack application using React and Rails. I did have my doubts on whether I was able to finish the assignment and my own additional goals but I did manage to complete most of them. In addition to a basic task manager, I sought out to include a login system, drag and drop, a sorting system, theming system and various other minor features detailed below in the user manual.

About the application itself, the application's frontend is handled exclusively by React and it communicates to the Rails backend through https requests with JSON objects, using a RESTful API interface. The login and authentication system is handled by cookies created with BCrypt Ruby module to ensure that logins are persistent as long as the cookies are not cleared. Having an account-based system allows every user to have their own tasks which is ideal.

I designed the application to be simple so that one can easily pick it up and start using it. The elements also dynamically resize based on the browser size so that mobile devices can use the application as well. The tasks are laid out in a grid format so that one can easily scan through multiple tasks at once. The search and filter system enables one to quickly find a particular task or group of tasks.

It is also possible to change the theme of the application through the settings page and this theme is cookies-based so different devices can have different themes.

User Manual

Full user manual available in the readme section of the [repository](#).

The application is available [here](#). Once there, you can either create an account or login to an existing one. You will be redirected to the tasks dashboard after doing so.

In the dashboard, you can create a new task by clicking on "Add Task" and filling in the details as necessary, only the name field is compulsory. In the dashboard, you can drag tasks around by holding on to the dots above each task with either the mouse pointer or touch input and moving them to the desired position then letting go of the mouse.

Tags are entered by separating them with a space.

To edit a task, you can bring up the focused modal of a task by pressing on the name of the task in the dashboard and then clicking on the field you wish to edit. The field will turn into a editable textbox. After which, you can press on save to save the changes, or press on the close button in the top right to cancel the changes.

To mark a task as done or to delete it, you can press on the checkmark and bin icons on each task respectively. To delete all finished tasks, you can press on the "Clear all Finished Tasks".

You can sort tasks by changing the sorting method near the top right of the dashboard. It is also possible to filter tasks through the search box and the search options. These options do not persist pass a session but it is possible to change the default settings for an account through the settings page. You can also change the application theme and account password there.

Once done, you can logout by pressing the logout button on the top right.