

CVWO December Assignment

Final Submission Writeup (25 Jan 2021)

Accomplishments

Backend with Ruby on Rails

Previously, I had experience in frontend development in React but very little backend experience. This was my first time creating and planning the relational databases and figuring out for what the columns should be. One challenge that I spent some time thinking about was what kind of relationship was the most suitable to represent the relationship between task and tags, where a task can have many tags and a tag can have many tasks too.

Redux

I had a bit of prior experience with Redux, but this was my first time setting up all the boilerplate on my own. It was also my first time figuring out how to tie in Redux with the backend API calls. This process really helped to solidify my understanding of Redux and be more confident in using Redux. I enjoyed learning the new tools available (i.e. [createSlice by redux toolkit](#)) which help reduce boilerplate, which was one of the things I didn't like about Redux originally.

TypeScript

JavaScript was the first programming language I learned, but I think it allows beginners to pick up bad habits when it comes to data types. Because of this, I'm not very used to being explicit with types when I'm programming. For example, I accidentally assigned the number -1 to a variable which was meant to be a string, and I only caught this mistake after I started explicitly declaring the types using TypeScript. TypeScript forces me to pay more attention to types and be more explicit in my code. I also like the verbosity of TS since I often find myself writing a function that takes in an object as input, but I've forgotten what keys the object has. In that sense, TypeScript helps with documentation.

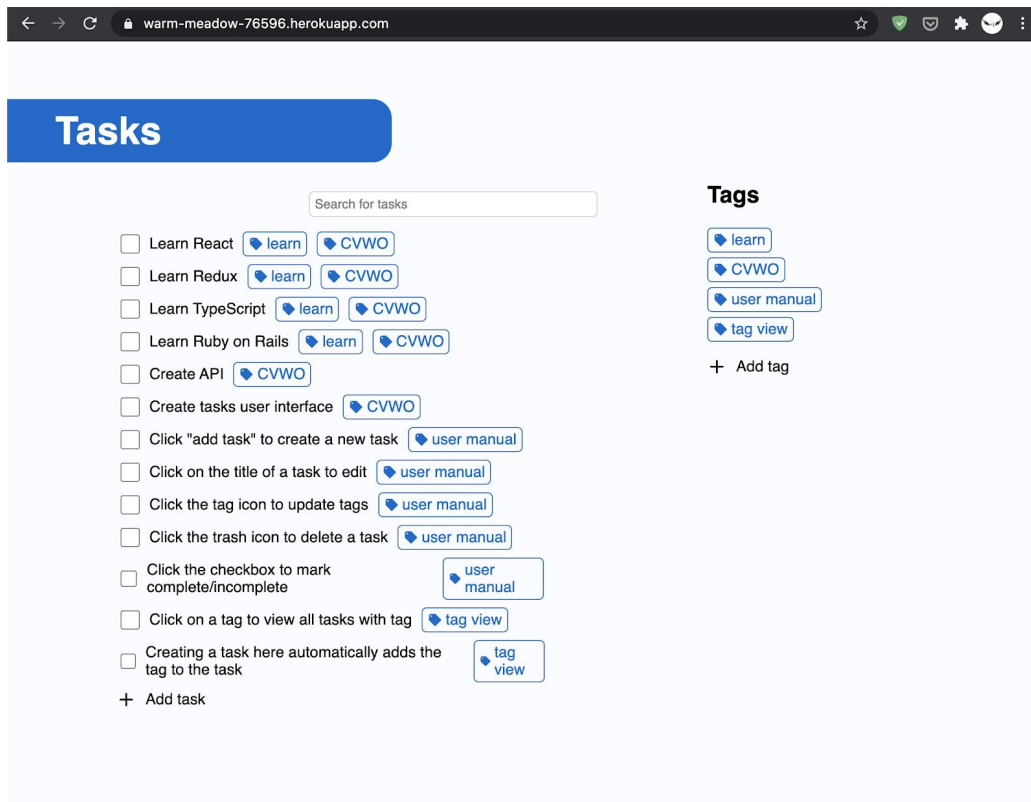
User Manual

Application is deployed at: <https://warm-meadow-76596.herokuapp.com/>

(initial load may take a while as the dyno needs to wake up)

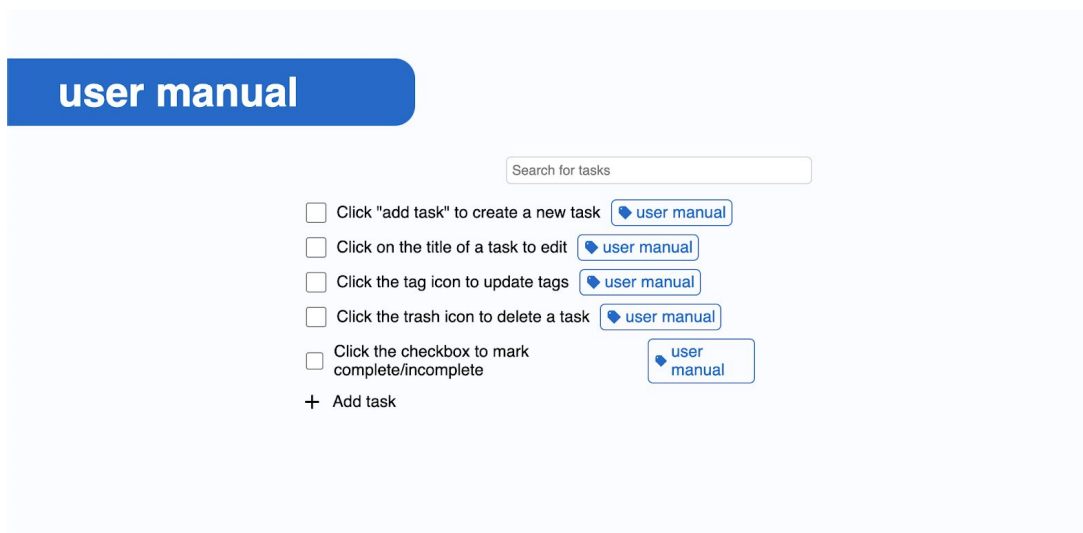
Homepage

The homepage shows the full list of tasks with various tags.



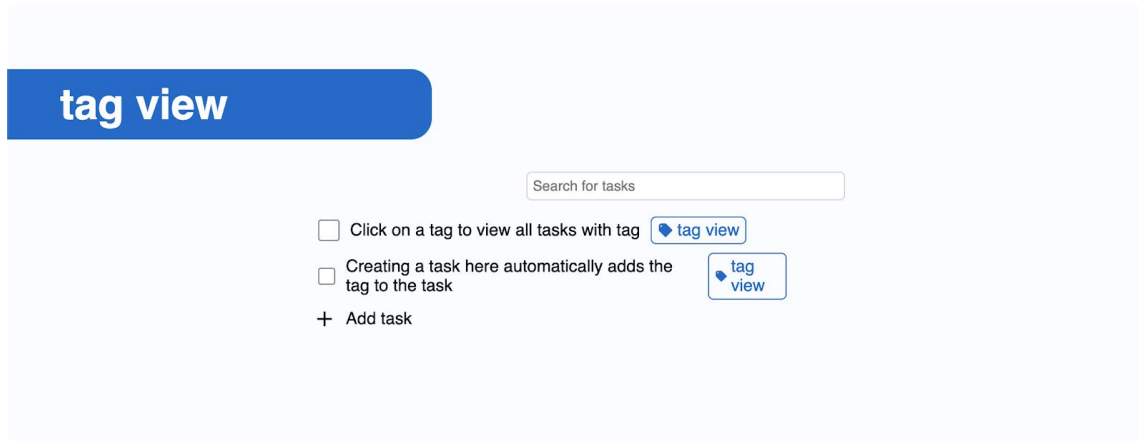
Basic functionality

Users can do basic CRUD actions like creating tasks, editing task name, updating tags, toggling completion and deleting tasks.



Tag view

Users can click on a tag to view all tasks which have that tag. This is a useful organisational feature.



Filter for tasks

Users can search for tasks using the search bar which will automatically filter for relevant tasks.

