CVWO Final Writeup

A. Reflection:

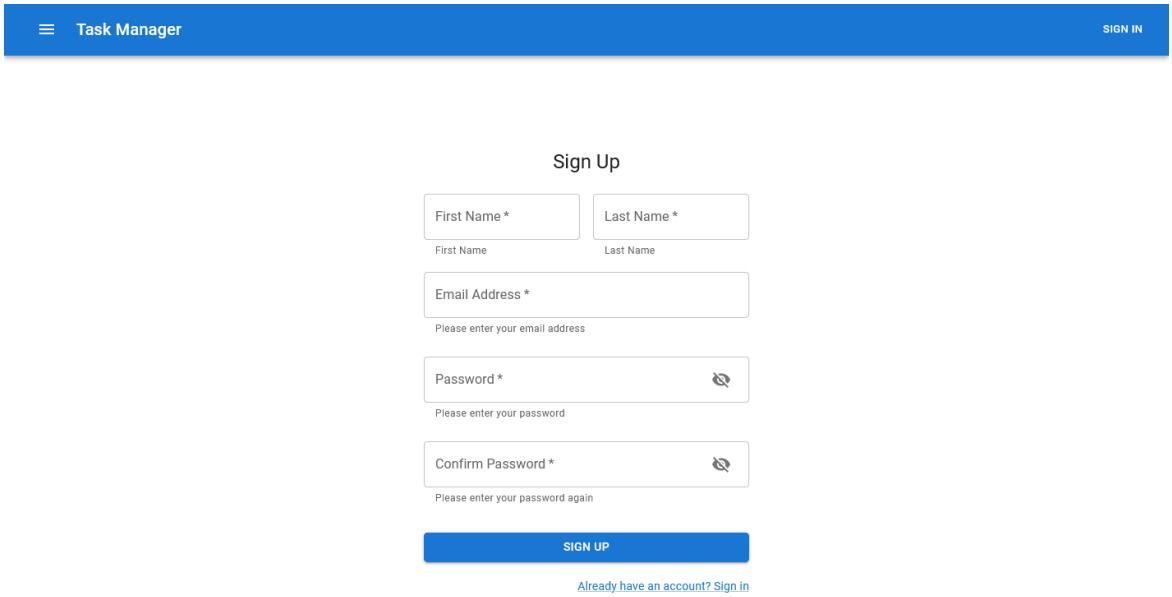
This assignment has offered an opportunity for me to learn about Golang and Typescript which I have no prior experience is despite working on React projects before. Learning about a new programming language while working on the assignment itself has provided me with the continuous motivation needed to push forward even though various challenges arose during the process. The assignment also provided a valuable chance for me to further deepen my knowledge about relational databases. Having worked with MySQL databases in the past, I have chosen to use PostgreSQL for this assignment as it better fits my use cases. The decision to use Material UI for the frontend was made as it allowed me to create a responsive version of the frontend application easily, which I believe is significantly important considering the increasingly large number of mobile Internet users.

While completing the assignment, I have also decided to learn about Redux and Docker. I ended up implementing Redux using Redux Toolkit, and I am truly amazed by the ability of Redux to allow me to manage my React application's state easily. Learning about Docker also proved very useful as it greatly simplified the deployment of both my frontend and backend application on AWS, and I believe it would be an important skill that I would continue to apply in my future projects. The deployment process also allowed me to enhance my understanding of Linux, particularly Ubuntu commands and networking software.

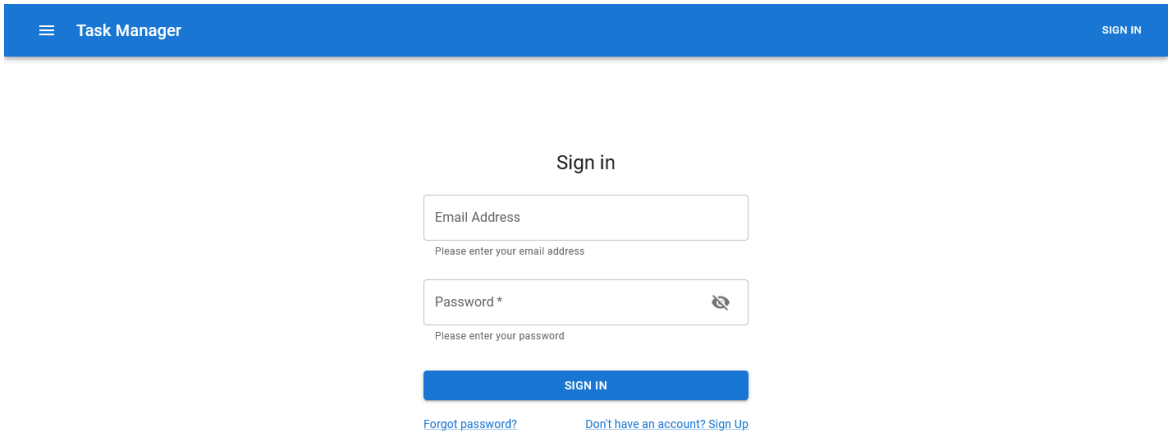
This may not be the first time I am working on web applications, but even though this assignment has been the most challenging and complex thus far, it is also the most enjoyable one, as I am sure that I am now better equipped with the necessary knowledge to build and design web applications than before. I am confident the experience that I have gained through this assignment will benefit me greatly in my future studies and career, and I aim to continue working harder towards my goal of building and developing applications that help to improve humanity's quality of life.

B. User Manual

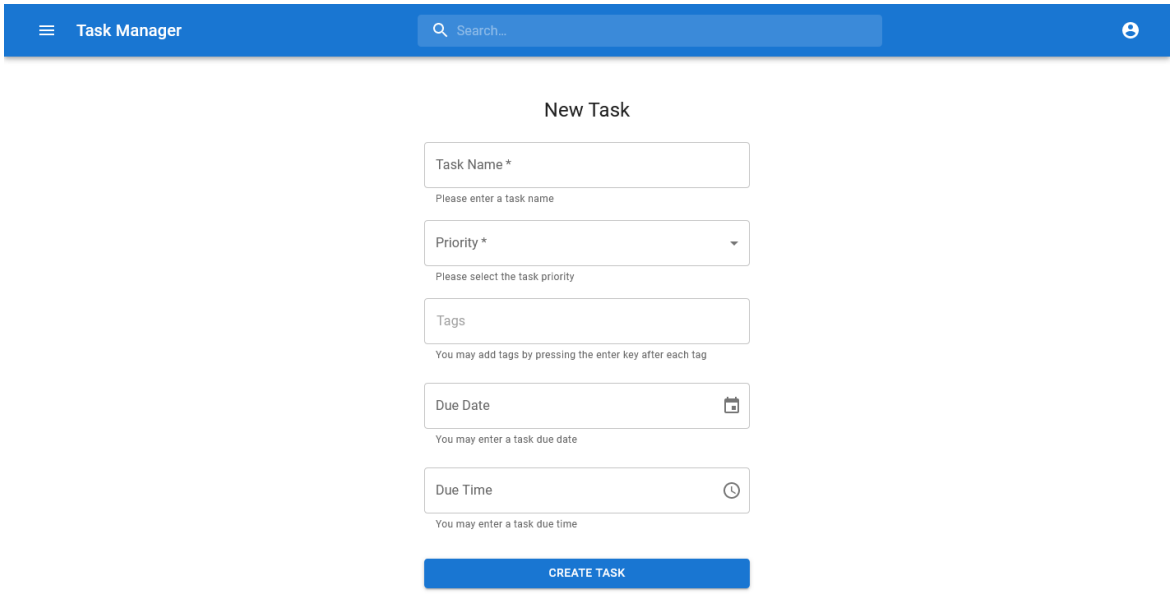
1. Users would need to sign up for an account before they are able to access the website.



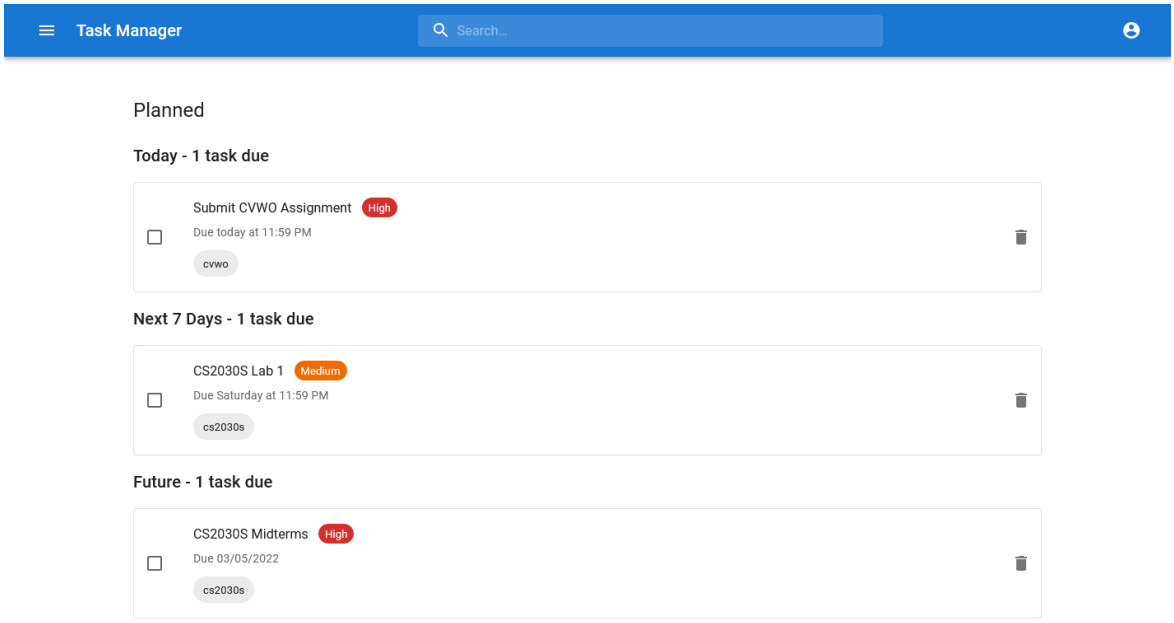
2. They would be prompted to sign in once the sign up process is complete.



3. Users have the option to create new tasks with different names and priorities, and optionally include tags to categorise their tasks. A due date or time may also be provided optionally, with a default deadline of 11.59.59 PM on the same day being assigned otherwise. All the fields may be updated anytime.



4. Users are also able to view all their tasks due on the same day and any future tasks in a planned-out list. Clicking on a task would allow users to edit a particular task.



5. Users are also able to search for tasks using the name, tags, and priority of the task using the search bar.

6. Users can toggle the checkbox on the left to mark a task as completed/incomplete if necessary and click the delete button on the right to remove a task.