

Final Writeup

User Manual

Welcome to SimplyDONE, a simple to-do web application!

Upon loading the application, you will see the login page. If you are a new user, you can click on the link to registration page, where you will be asked to enter a valid email and a password of at least 6 characters.

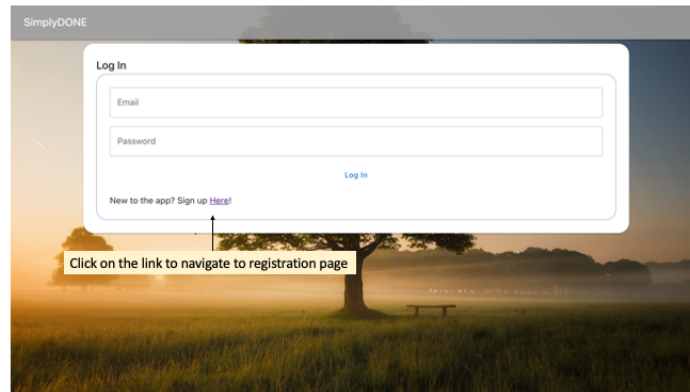


Figure 1 Login Page

After logging in, you will be directed to the home page.

In the home page, you can view your tasks in a table. The default view shows all of today's tasks, with the overdue ones in red. The toolbar above the table allows you to apply different filters and sorting orders. You can delete, edit, or complete/undo a task by clicking on the respective action buttons.

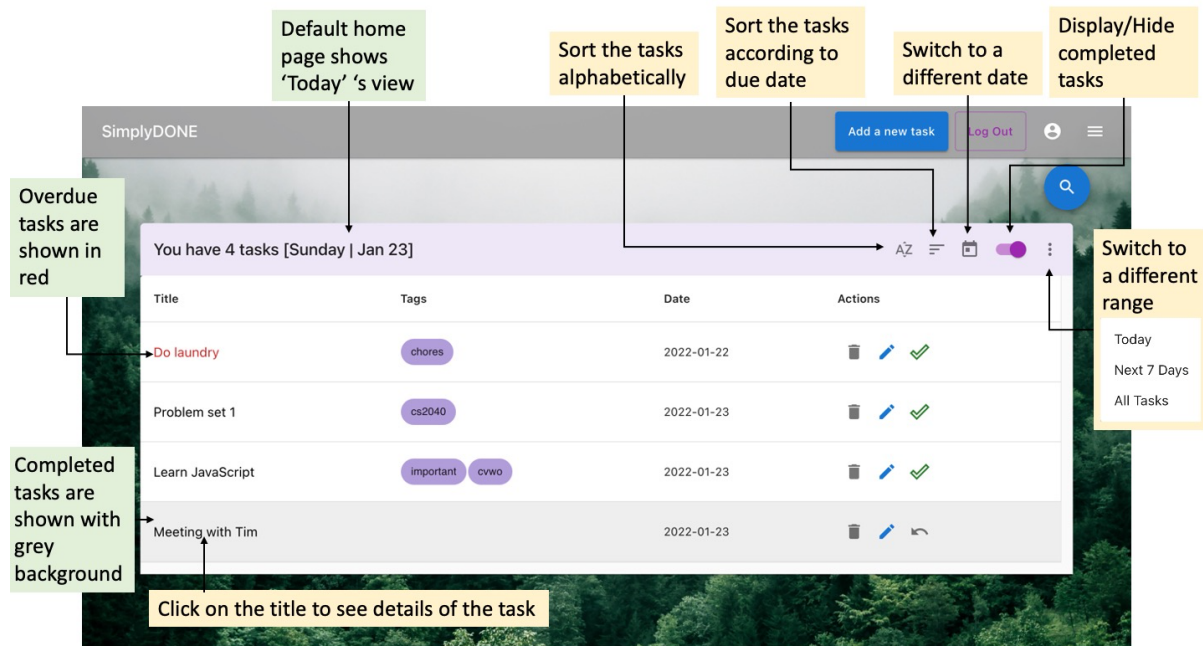


Figure 2. Home Page

Upon clicking the search button at the top right corner, a search bar appears that allows you to apply search filters on title, tag, as well as date range.

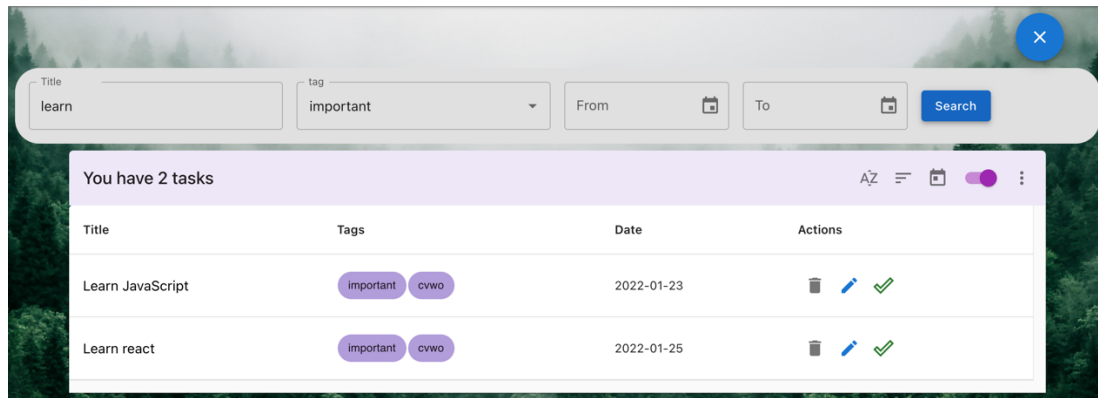


Figure 3. Search Bar

The navigation bar at the top of the page allows you to add a new task, go to profile page to reset password, log out and open navigation menu easily.

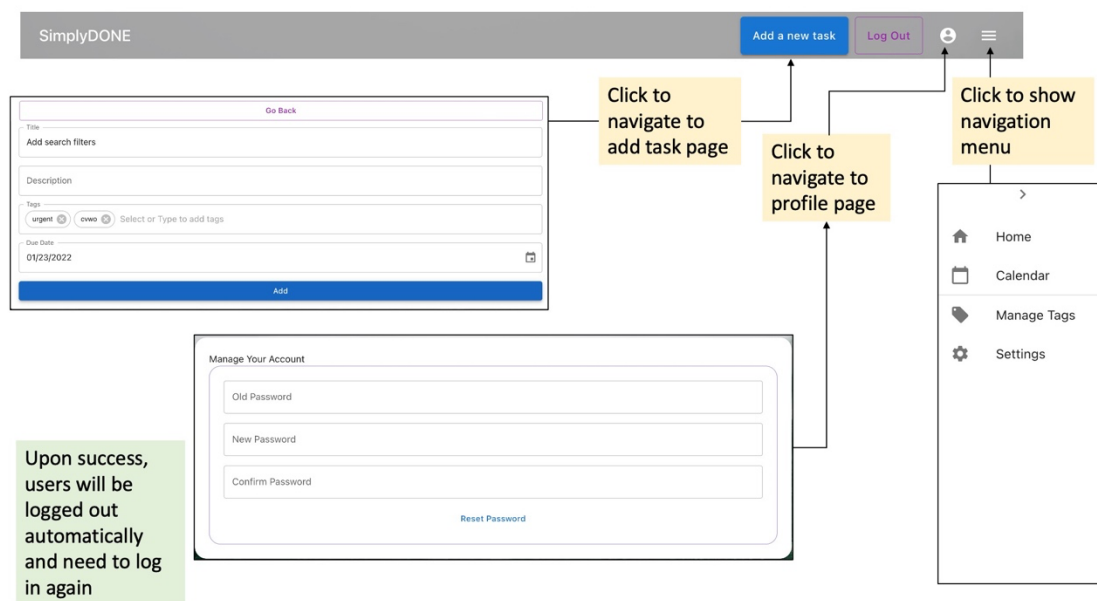


Figure 4. Navigation Bar

Upon navigating to the Calendar page, you will see a monthly calendar view marked with your tasks. Click on the task item to view its details. Click on the “Next” or “Back” button to change month.

The Manage Tags page displays all the tags you have created. Click on the tags to modify or delete them or click on the plus button to add new tags.

You can change the background of the application by going to the Settings page and click on the images provided.

What I feel about my accomplishment in this assignment

Before working on this assignment, I have no experience in working on projects, let alone web app development. I saw this assignment as a great learning opportunity and treated it seriously. Being able to produce a full stack application from scratch and deploy it is a wonderful experience.

I have gained a good understanding of the React and Rails framework, and the workings of a web application. Learning React, Rails, Redux altogether was challenging, and there are so many topics that this application touches on such as typescript, JWT, CORS and so on. I have grown a lot through the process of reading tutorials and debugging, and gained valuable programming skills.

In addition to learning the technical knowledge, (and more importantly) I have become more confident in learning on my own. Due to my lack of experience before, I was often overwhelmed by the idea of starting projects and confused about where to begin. The assignment impelled me to learn many topics quickly by myself. Thanks to this, I discovered many great resources and tutorials. Most importantly, I learnt how to find answers. I have grown used to reading official documentations and APIs as they usually contain the most up-to-date information. I know how to solve an issue with the help of tech communities and YouTube. Instead of feeling clueless about a completely new topic, I now have the faith that I can figure it out on my own.

Outcomes and room for improvements

I managed to implement all features planned in the midterm report except for the focus mode with timer due to lack of time. I added an additional feature that allow users to choose background for the app from the options provided.

I have also identified some deficiencies of my application upon reflection:

1. Ability to handle large amounts of data with pagination

Initially, I handled searching and filtering completely in the frontend. However, after some research online, I found that handling search in the backend would be better if we are dealing with huge amount of data as it is inefficient to load all the data to the frontend. Although I did switch to backend searching, I realized that it is not a complete solution without setting a limit to the number of records (eg. 20) retrieved in a single query and implementing some pagination to retrieve more records on click.

2. More responsive UI design

The current UI is not optimized for a smaller screen like mobile phone. Making the app more responsive to screen size is something I will work on in the future.

3. Testing

Without proper training in software engineering, I wasn't sure how to conduct testing for an application except clicking around manually and 'console.log things'. I did not have enough time to learn how to systematically test an app. As the app gets more complicated, I realized the importance of testing and I will devote more time into learning this aspect.

In the end, I would like to thank Prof Ben Leong and the CVWO trainers for this great learning opportunity. I have my potential as well as my shortcomings. Whether I'm selected or not in the end, I will maintain the momentum and continue to delve deeper into the field of computer science!