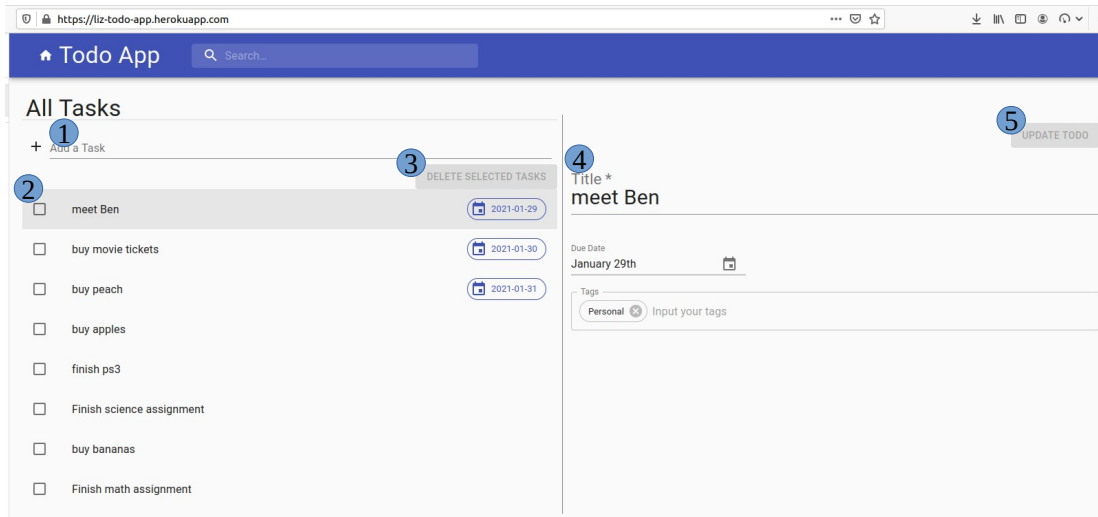


Name: Elizabeth Chow Ting San A0192318A

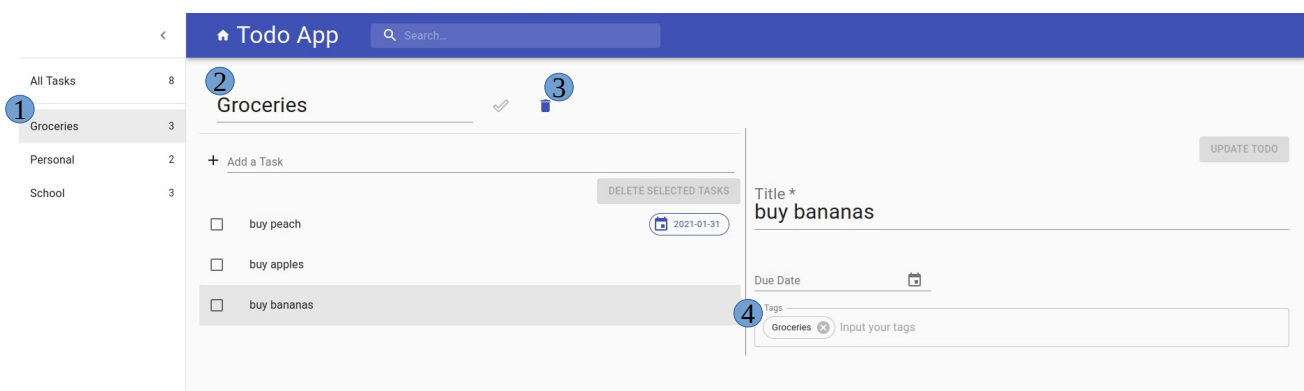
CVWO Assignment Final Submission

User Manual (Website: <https://liz-todo-app.herokuapp.com/>)



Create, Read, Update, Delete (CRUD) Todos

1. Type in name of task and press “Enter” to create Todo
2. Select a Todo to view more details about the task. Check the checkbox when the task is completed.
3. Click the “Delete Selected Tasks” button to delete all checked Todos.
4. Edit the details(Title, Due Date and Tags) here.
5. Click the “Update Todo” button to update the Todo.



1. View the tags that have been created. Click the tags to view Todos that have been tagged with it.
2. Update the Tag name.
3. Delete the tag
4. Select from the created tags or type in a new tag name in the input box to create a new tag.

Reflection

Through this CVWO assignment, I have learnt the foundations of web development and web programming languages, Ruby on Rails and React. I had prior experience with web development, working with Python and HTML/CSS/Javascript. However for this assignment, we were required to use Ruby on Rails and React, which I had no prior experience in, hence this assignment is a steep learning curve for me. Despite the challenges, I found this assignment quite a fulfilling experience.

The CVWO assignment emphasises heavily on independent learning, which is rather important in the software industry, where new developments are happening at exponential rate. I picked up Ruby and React by following online tutorials and adapted it for my own app. I learned the basics of Ruby on Rails such as creating tables, controllers and validations and applied the knowledge to setup the backend API of my app. I was able to achieve CRUD operations for both the Todos and Tags and using the ‘acts-as-taggable-on’ gem has made my life easier to implement the tagging system for the app.

As for React, React is quite different from the HTML/CSS/Javascript that I previously learned, it allows for complex state management and interactive user interfaces, thus it was exciting to learn React. I also learned Typescript to ensure that the application follows strict static typing. I built my frontend user interfaces by combining multiple smaller components into the parent component, this made debugging much easier. Another benefit of React is that it comes with existing UI libraries such as Material UI. Material UI made designing and styling of the user interface much easier than styling from groundup with CSS. While I did explore Redux, I did not manage to implement it in time for submission, thus I will be working to implement it after this submission.

Overall, this assignment served as an excellent learning experience for me. It was the first time I am working on such a project and it gave me a first hand experience of independent learning and long hours of debugging of subtle bugs, which frequently appear at weird places. I am glad that I managed to build a full stack todo app with decent functionalities with easy user interface. If I am selected for CVWO, I am confident that I will be able to overcome any challenges during the program.