**CVWO Mid Assignment Writeup**

**Use Case:**

User add task to “to-do list”

*Description:* When the user has a new task, they will add it to the “to-do” list

*Action Flow:*

1. User enter the task description to a textbox
2. User clicks the “tag” icon and add in a category (Optional)
3. User click on the “add task” button
4. Task is successfully added to the “to-do” list

User searches for task

*Description:* When the user wants to search for a specific task, they can do so with the search box that searches base on the description of the task / category name

*Action Flow:*

1. User inputs text of the task onto the search bar
2. The “to-do list” will be updated to only show a list that contains the text on the search bar

User filters the result base on categories

*Description:* When the user wants to filter the “to-do” list based on categories / tags

*Action Flow:*

1. User clicks on the select list dropdown of all the current categories / list and choose the category that they want to filter
2. The “to-do list” will be updated to only show a list that contains the selected category

User updates description of existing task

*Description:* When the user wants to update an existing task, they can click on the task itself and change the description

*Action Flow:*

1. User finds the task to be updated
2. User clicks on the task, where a cursor will appear
3. User updates the task description / tagging category
4. User clicks on the “update” icon button for the task

User remove task from “to-do” list

*Description:* When the user wants to remove a task due to wrong input, they will have a button to remove individual task from the “to-do” list

*Action Flow:*

1. User finds the task to be removed
2. User click on the “delete” icon button
3. Confirmation message to confirm if the user wants to remove the respective task
4. If the user selects “Yes”, the selected task will be deleted from the “to-do” list

User finish task from “to-do list”

*Description:* When the user has finished a task, they will be able to tag it as so

*Action Flow:*

1. User finds the task that has been completed
2. User clicks on the “finish” button
3. Confirmation message to confirm if the user has completed the respective task
4. If the user selects “Yes”, the selected task will be moved to the end and be shown as a strikethrough text

**Execution Plan:**

Firstly, I will focus on using CSS and bootstrap to beautify the website making it more user-friendly. The end product should look similar to the wireframe attached at the end of the report.

After the web design is completed, I will move on to connecting the application with the database. For this project, I will be using SQLite for the database.

After the link from the database has been set up, I will move on to creating the basic CRUD functionally. The user must be able to enter the task description through the textbox. Then, by clicking enter or an “add task” button, the task will be added to a “to-do list”. This can be achieved by doing an Ajax call to SQLite so that the information can be entered into SQLite. Then I will move on to creating an update function where the user is able to update a task description, and click on the “update task” icon to update the task information. Thereafter, the user will be able to delete the task through an icon on the right side of each task. The user can also “finish” the task by clicking on the “finish” icon on the right side of each task.

Subsequently, I will move on to task 2 by introducing a categorisation system. Through this system, there will be an additional icon on the right side of the input textbox where the user can choose which “tag” they want to categories their new task under. The user should be able to add a new “tag” to the system to ensure that it can cater to different people's needs. Below is the rough timeline / deadline for the execution of the project:

**Possible Problems:**

* Lack of technical expertise
  + As a freshman in computer science, I am worried that I am not skilled enough to achieve my goals.
  + React and Ruby on Rails are new to me and I will have to pick these skills through online videos and tutorial myself

**Wireframe:**

