**CVWO Mid Assignment**

Lim Koon Kiat A0196583M

**Use Cases**

UC1: Add a task

MSS

1. User requests to add a task
2. App adds the task

Use case ends

Extensions

1a. The user did not specify a name

* 1a1. The app prompts the user to key in a valid name

Use case resumes at step 1

UC2: Show a task

MSS

1. User requests to see a task
2. App shows the task with all its details

Use case ends

UC3: Update a task

MSS

1. User requests to update a task
2. App updates the task

Use case ends

Extensions

1a. The user did not specify a name

* 1a1. The app prompts the user to key in a valid name

Use case resumes at step 1

UC4: Delete a task

MSS

1. User requests to delete a task
2. App deletes the task

Use case ends

Extensions

1a. There are no tasks to delete

Use case ends

UC5: Add tags to a task

MSS

1. User requests to add tags to a task
2. App shows all tags that can be added to the task
3. User selects the tags to be added

Use case ends

Extensions

2a. There are no tags to add

Use case ends

**Execution Plan**

Completed steps:

1. Implemented CRUD operations for *tasks*
2. Added *tags* and their CRUD operations to allow users to categorise their tasks
3. Added a search function to allow users to search for tasks by name and description
4. Added user accounts vis the *Devise* gem

Not knowing Ruby, Ruby on Rails, or anything about web development, this assignment has been very hard for me. The Ruby on Rails guide, while detailed, was very verbose and thus difficult to find solutions to the problems I encountered. For example, trying to join tasks and tags together proved to be a harder challenge then I expected, and I only found the answer to my problem from a comment on StackOverflow. Many times, I feel that I was just following along without really understanding what is happening. Nevertheless, I am quite pleased with the current state of the app at this point in time. Still, there are many ways for me to improve it, as follows.

Future steps:

1. Learn React and JavaScript to apply them to the app
2. Improve the look of the UI
3. Extend the search function to include tags if possible
4. Look into implementing some form of sorting
5. Host the app on the web via Heroku
6. Look into implementing the optional tasks if time permits

In particular, I think integrating React might prove to be the most challenging part of this assignment as besides not having any knowledge of both React and JavaScript, using them might also mean huge changes to how my app operates, especially the views portion of the app which I had already put some effort into. Many of the optional tasks listed seem useful for future applications and I think I will read up on them, even if I do not implement them in this app.