CVWO Riding on Rails Mid-Assignment Write-Up

BASIC USE CASES

| Use Case 1: | Performing CRUD operations on Tasks |
|-------------|--|
| Brief | Users can: 1. Create new tasks 2. View all the tasks remaining to be completed 3. Update the existing tasks 4. Delete the existing tasks |
| Basic Flow | User can view all the tasks by going to the index page. User can create new tasks by clicking on the 'new task' in the index page User can view the contents of an individual task (tags, time of creation etc) by clicking on the individual task User can edit/delete the task either from the index page or each task's own page |
| Extension | Try to perform CRUD operations using AJAX. |

| Use Case 3: | Star/Prioritize Tasks |
|-------------|---|
| Brief | Users can: 1. Star their tasks so that it is highlighted and is more visible 2. View all starred tasks on the index page |
| Basic Flow | All tasks that are starred have their ids stored in a separate table called 'starred tasks' On the index page, a special list of starred tasks will be shown |
| Extension | |

| Use Case 4: | Tags |
|-------------|--|
| Brief | Users can: 1. add/view/update/delete tags of any task 2. search tasks by tag name |
| Basic Flow | each tag is stored separately in the database with a tag_id when a tag is searched, all tasks with that tag are displayed |
| Extension | |

| Use Case 5: | Lists |
|-------------|--|
| Brief | Lists are basically a collection of one or many tasks. Users can: |
| | Perform CRUD operations on Lists. Use lists to categorize their tasks more efficiently |
| Basic Flow | Each list has a unique list_id. Each task has a list_id associated with it which is used to reference the list it belongs to. |
| Extension | Allow tasks to belong to more than one list. |

| Use Case 6: | Users |
|-------------|---|
| Brief | Users can create accounts. Each user can perform CRUD operations on lists. |
| Basic Flow | Each user has an unique user_id Each list has a user_id associated with it which is used to reference the user it belongs to |
| Extension | Allow users to collaborate/share lists. |

EXECUTION PLAN

GENERAL PLAN:

First, I want to get a better understanding of how Rails works. I want to look some examples and reading the documentation to understand how to efficiently use the MVC framework.

Then, I just want to get a basic working prototype which I can perform CRUD operations. After that I want to add support for features iteratively and remove redundant features.

FRONT END DESIGN:

Building RESTful applications in Rails appears to be much faster than using MAMP. So for this assignment, I want to focus more on the front end design. I want to explore Bootstrap deeper and try to incorporate Bootstap.js which I have not used before. I also want to use AJAX more deeply to create a better UX for the users.

PROBLEMS I AM CURRENTLY FACING

RAILS:

Rails generated many routes by default. I don't need many of them but I still can't manage to delete those routes.

I am still facing difficulty in fully abstracting my code to reduce redundancy. One way I am trying to do this is using helper functions to do similar work.

I still can't fully appreciate and get used to Rails' convention over configuration principle. The use of plural vs singular entities, and other require operations are often confusing because I get unexpected errors when I use the wrong variable (singular/plural) or create my own variables/functions.

Rails has so many abstraction layers that sometimes, I can't fully understand whether rails does something because I configured it do so or its a default mechanism of rails. I guess this is the convention over configuration thing again.

RUBY:

I still can't understand what symbols are why we use them over strings.