CVWO Write-Up [Final Submission]
<u>**Accomplishments**</u>
Through working on this assignment, I have learnt valuable knowledge and skills in web development and sharpened my software engineering skills.

In terms of technical skills, I have learned basic-to-intermediate level of web development skills using Ruby on Rails and React which are popular technologies in the market nowadays. I have also learnt a few popular useful libraries such as React-Bootstrap and axios which have greatly assisted me when developing the application.

On the other hand, I am glad that I was able to put my software engineering skills to more practice and further improve it. For example, the development process has reinforced important software engineering principles that I have learnt, such as the open-closed principle, writing test code, quality code and documentation. These principles have greatly helped me to continuously develop the application iteratively without getting lost and blowing up my codebase. Also, being able to use reliable external libraries has taught me the importance of code reusing as it helps to save a lot of time and resources when developing an application.
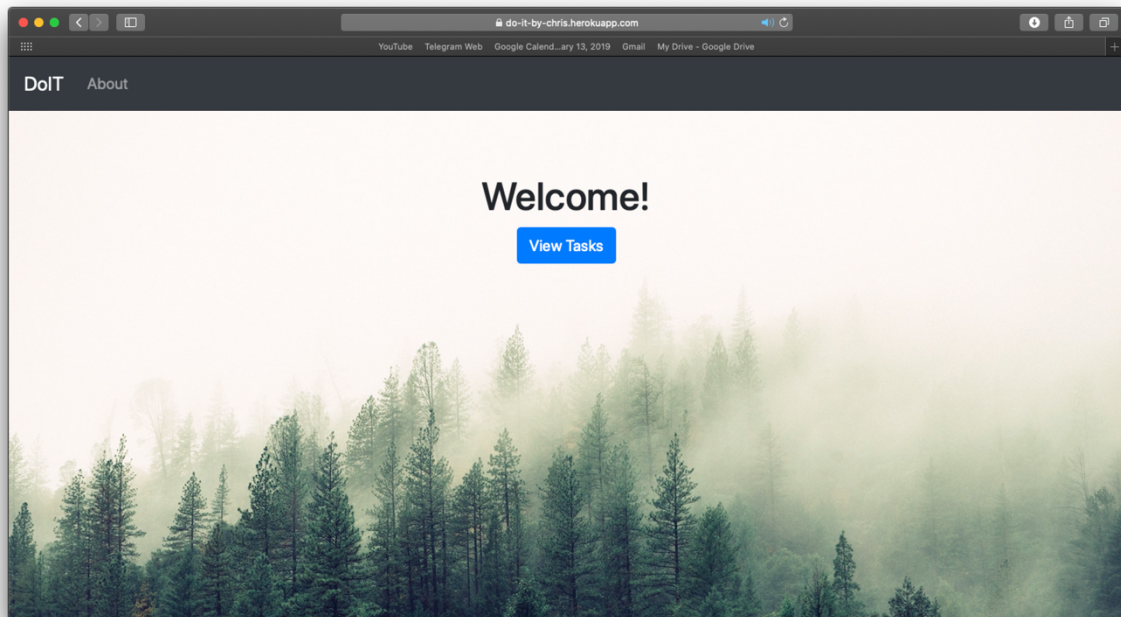
To be frank, the assignment was quite challenging for me at certain times when I wanted to implement a certain feature because at those times, I haven't had the knowledge and skills for it. However, one year in computing has greatly improved my resourcefulness. I searched through the Internet for solutions or thought of a different way to approach and work around the problems I faced. As a result, my problem-solving skills were further improved.

Lastly, I have learnt and better understood the concept of "how to learn" in terms of computing-related skills. I have attempted the assignment when I was in year 1; however, I adopted the waterfall approach where I read up as much as I could about Rails before developing the application. It turned out that it was not a good way because I faced a lot of difficulties when developing the application and was greatly demotivated. I believed the cause behind it was that I tried to absorb a lot of information about Rails without writing much Rails code which compromised my learning. This may also due to my lack of software development experience back in year 1 semester 1. In my second attempt of the assignment, I have finally learnt how to approach the assignment and learnt the required skills. I chose an iterative approach to learn in which I first learnt the basics of developing a Rails and React application by taking some online courses. I then proceeded to develop the application and learnt the relevant parts of Rails or React when I needed them to implement a certain feature. As a result, I was more motivated to develop the application as I could continuously see progress in developing the application. Also, I was able to better retain the knowledge I learnt as I had practised it through developing the application.

To sum up, the process of working on the assignment was very enriching as I have learnt and practised valuable knowledge and skills when developing the application, other than giving me the joy of creating useful products!
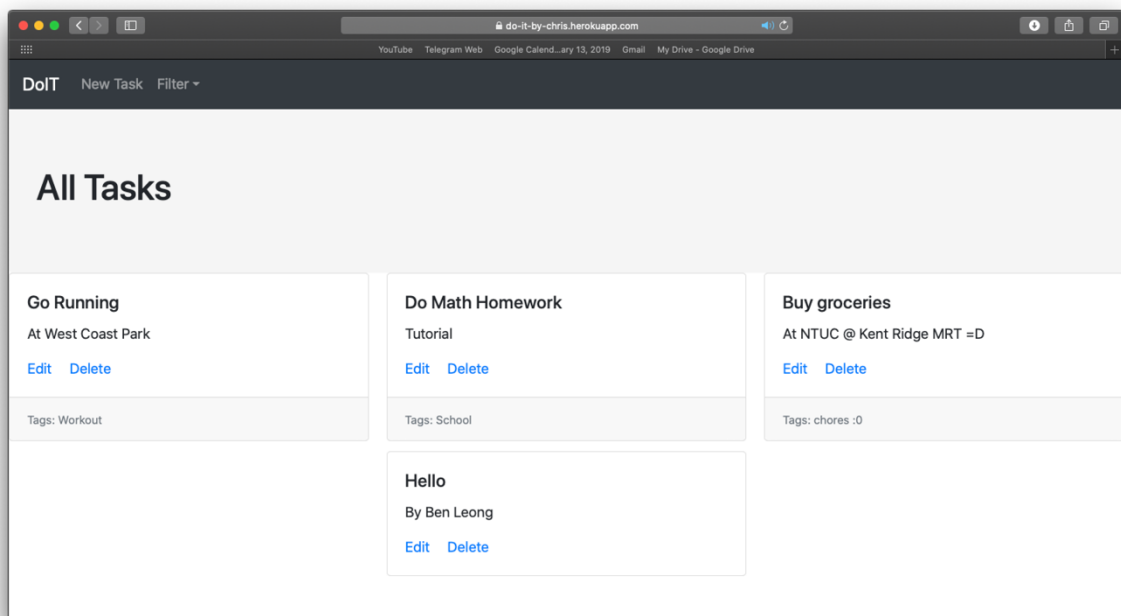
User Manual (Quick Start Guide)

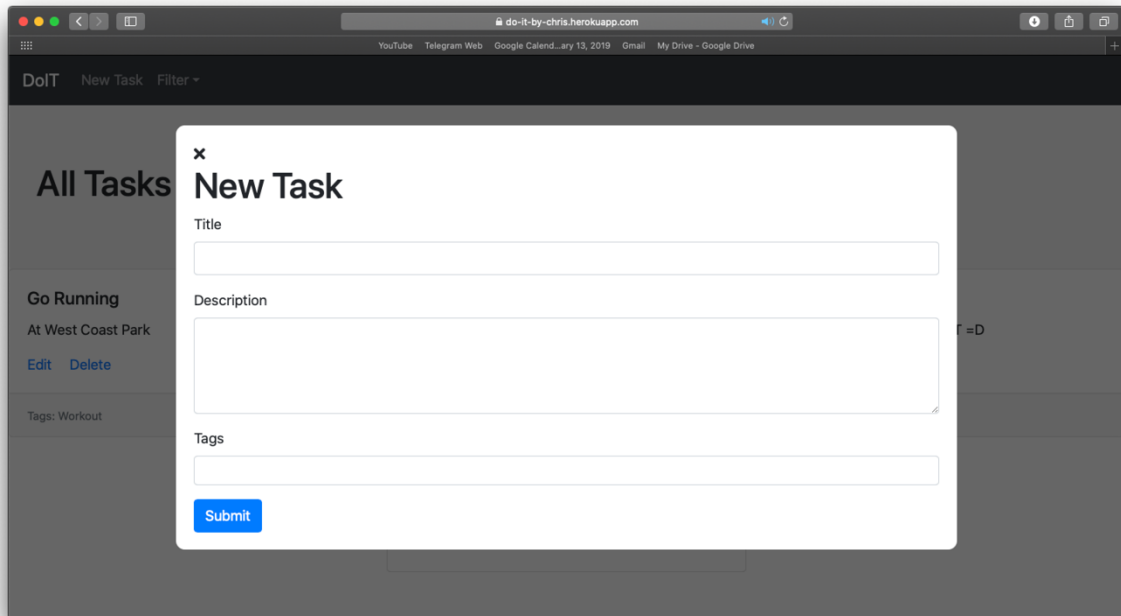1. Visit https://do-it-by-chris.herokuapp.com

- This is the homepage of the application. Click on the **"View Tasks"** button to start using the app!
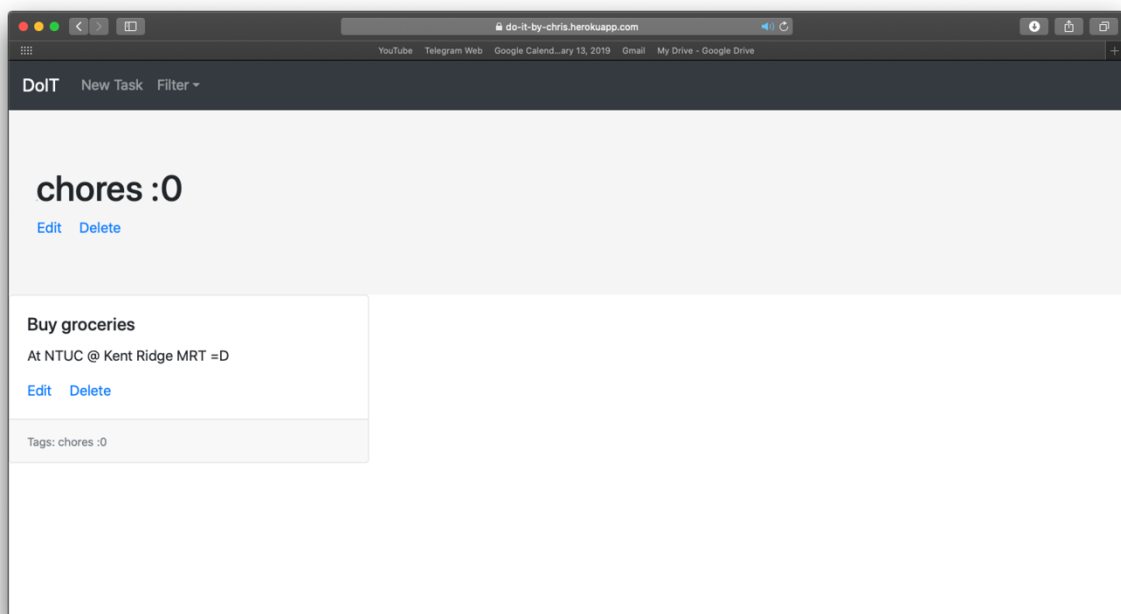
2.

- This is the landing page of the app. To create a new task, click on "**New Task**" in the toolbar on the top of the page. A form will then pop up which you can fill up the title and description of your task. You can also tag the task to help you better categorize your tasks.
- You can **create a tag** by typing the tag name in the Tags field.

- To edit a task, click on the **"Edit"** button of the task you want to edit. A similar form will then pop up.
- To delete a task, click on the **"Delete"** button of the task.

3. To view the tasks according to tag, click on **"Filter"** in the toolbar. Choose your desired tag in the dropdown and the list of tasks associated with the chosen tag will then be shown.

- You can either **edit** the name of the tag or **delete** it by clicking the corresponding button under the tag name in the page.

4. That's it! Explore around the app and hope you enjoy using it!