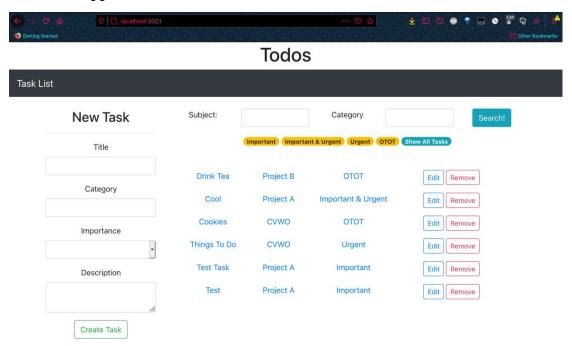
<u>User manual:</u>

To run: download the repository. You might have to install the dependencies (the node_modules)

Run the rails server by typing bin/rails s on localhost:3000. Run the react front end on another localhost, by typing npm run start

The Todo App looks as follows:



On the left, you can create a task. You must assign every task a title, category, and importance. When you are done, clicking create task adds it to the database and the list on the left; your new task will appear at the top.

On the right, you can search your tasks by subject and category, where subject searches for the keyword in the title or description, and category searches the category. You can use both search fields (the operator is and), or just one. You can also filter your tasks by importance by clicking on the yellow tags underneath the search field

You can edit and delete tasks by clicking the relevant buttons. There is a slight bug where you cannot immediately delete a task when you have just created it.

To view more details of your class, click on the name of the class.

Personal write-up

Overall, I am very glad I attempted this assignment. I found it challenging due to my inexperience, but I learned a lot through the experience. Even though I think I could have put out a better project, I try to remind myself that the practice will make me a better programmer.

I am proud of

-read a lot of tutorials and documentation

I have a greater appreciation of "reading documentation" as a skill. Over the course of this project I read a lot of documentation - of rails, ruby, react, routers, bootstrap, and I think that helped me to understand the code from tutorials rather than blindly copy-pasting. That allowed me to modify the code to create what I wanted to create, and deviate from older tutorials to follow best practices. For example, I used the resources: command in rails to generate the routes, instead of manually writing out the routes as shown in the tutorial.

I relied heavily on tutorials, and but used these two guides the most, which I want to credit them for:

 $\underline{https://melvinchng.github.io/rails/SearchFeature.html\#41-create-a-page}\\-for-search$

and

https://medium.com/better-programming/the-beginners-guide-to-building-apps-with-react-hooks-and-a-rails-api-back-end-a414dade8e28

-implementing REST

It was difficult to figure out how to integrate the back-end and front-end, especially with passing variables back and forth. Print statements were my friend! I think this will be a particularly useful skill, so I'm glad I didn't just go with the react-rails gem, which is what I tested initially

-tested react on rails first

At the same time I'm glad I tested this and researched this first; while my understanding is still rudimentary, at least I understand the different ways of implementing it.

-learned about libraries like bootstrap

Open source is really powerful, and I'm glad I got to explore a new library!

I wish I had more time for:

- -researching and implementing typescript but didn't feel confident switching my project halfway
- -differences between different type of routers and the use of routing in react vs

rails

- -researching gems for authentication etc
- -making my front end prettier and more interactive
- -creating linked databases in Ruby. I actually researched a lot about this, but decided to shelve it given time constraints

Known vulnerabilities / problems

- no security (vulnerable to hacking) I think my rails key is also exposed
- bulky?
- best practices. I think I used both yarn and npm? From my understanding that are both package managers, and I read it is best to just use one
- duplication. It would be nice to be able to put edit task form and new task form on the same code file, but I was afraid to break it.

I'm glad that I did this! I have a lot to improve on, but that will be for another day