<u>ComplaiNUS – Craigton Lian Ee John A0258986B</u>

This has been a hugely fulfilling winter break for me due to the sheer amount of stuff I've learnt – some of which I feel competent in, some of which I'm still half-navigating my way through.

What have I learnt?

HTML, TailwindCSS, Bootstrap, React, Redux, Typescript, Ruby on Rails, PostgreSQL, Heroku, Netlify, Account-based Authentication with Devise-JWT Gem

The stuff I've learnt, and my rating of my mastery of it:

(9/10) HTML5

I feel fairly confident that I have grasped enough HTML for the day-to-day webdev needs.

(10/10) CSS3/TailwindCSS/Bootstrap

I had extensive exposure to CSS, as well as the Bootstrap framework, but ultimately I fell in love with TailwindCSS for it's ease of use. I did 3 mini-projects to get comfortable with implementing CSS.

(7/10) ReactJS/Redux/Typescript

I had to reset my frontend project multiple times in order to incorporate newer elements such as Redux Toolkit and Typescript, but through that process, it has helped me gain intimate knowledge of the basic blocks of React. I am comfortable with managing states, using the various hooks, and some extent of prop-drilling. I have a basic understanding of the flux architecture in Redux. But I still faced many problems and bugs in it's implementation. However, I am aware that there is still a lot of untapped functionalities that I have not mastered.

(7/10) Ruby on Rails/PostgreSQL

I feel that Rails is one of those frameworks that can do so many things, but I've only learnt the parts that are relevant to my specific needs. I must have restarted my backend project at least 5 times, because it feels so difficult to remedy problems if they were not setup correctly in the first place. Again, through this constant head-banging process, I've have learnt to plan my database schema thoroughly and well in advance.

(9/10) Deployment on Heroku/Netlify

Deploying my frontend on Netlify was completely hassle-free, so I'm quite please with that. But I had many challenges with deploying my backend on Heroku. I had to learn to seed my Heroku database. For some reason I have not resolved, I couldn't use Postman to call my API on Heroku. I had fix some cross-origin-call bug. Basically everything broke once my backend was pushed to Heroku and I had to figure out what I did wrong. In the end, ironically, I found this debugging process to be the most satisfying of all.

(10/10) Devise/DeviseJWT Gem

After scouring hours and hours of tutorials, I finally feel confident enough to implement account-based authentication using the Devise Gem and through the use of JWTs.

Frontend link: https://complainus.netlify.app

Backend link: https://complainus-backend.herokuapp.com

User Guide

- 1. Go to https://complainus.netlify.app.
- 2. Click on Sign Up at the top right corner.
- 3. Fill in email and password, and click submit.
- 4. Fill in Login form, and click Submit.
- 5. Due to an unresolved bug 🙁 please refresh the page once more after logging in.
- 6. If you logged in successfully, you should see "Signed in <your-email>" on the top bar.
- 7. You may create a post by filling in the post title and post body. Try it!
- 8. Due to another unresolved bug (probably the same one as above) Please refresh the page once more after posting the new post.
- 9. Post editing is accessible by ALL users for now, and it is not restricted to only the author of the post. I have not been successful in implementing user authentication for post editing.
- 10. The post delete is also accessible by ALL users for now. However, only posts without child comments can be deleted. As such, if you created a brand new post, that post can be deleted. But some of the existing fake posts (like postTitle6 etc) may not be deleted since they are linked to comments in the backend.
- 11. As of now, there is no functionality implemented yet to display a single post along with it's associated comments.
- 12. The tag table has been created in the backend, and it is associated with each post. However, every new post created is currently associated with "tag1" by default. The functionality of tagged posts has not be implemented in the frontend.
- 13. When you're done, click Logout to log out.

Thank you for taking the time and I hope you enjoy ComplaiNUS!