## **CVWO Final Writeup**

## **Personal thoughts**

I took up this assignment as I felt that I wanted to learn web development. I have been coding since secondary school, but somehow I never got to developing a web application, as I mostly stuck with desktop Java applications and smaller programs to solve mathematical problems or programming contest problems or CTF challenges, or even training and using Artificial Intelligence models. So I felt that embarking on this project would be a great value add to my current skillset.

I felt that I learnt a lot through this assignment. Web development involves many new skillsets that I have picked up over the course of the assignment. Firstly, on the technical side, I was picking up React and Go to develop the frontend and backend respectively. Even though the concepts behind these technologies were simple, getting to know the best practices and the available libraries out there to aid in development took a while. Furthermore, I learnt about REST API and how to use it to allow my frontend and backend to communicate with each other. On the other hand, I have also learnt to think of the user experience and user interface. While my web application may not be the most aesthetically pleasing, I decided to put some time effort to make it at least usable and not hurtful to the eyes or behave weirdly.

However, I also felt that there are many ways my application could be improved. For one, the application currently only has one user and everyone is using the application as that user. I have tried to use JWT tokens to improve this, but I found that I ran into many problems and decisions I had to make, like whether to store the token into HTTP cookies or in my react app. My half complete attempt can be found in the login-test branch of both my frontend and backend repositories on GitHub, and I plan to continue working on this in the future. However, as of now I am unable to complete this.

Another way my application could be improved is to implement the tagging system. I have implemented the tagging system in the backend, but I did not have enough time to implement this in the frontend after burning my time on JWT tokens. I have tagged one of the posts with some tags in the database to show a sample of what it would look like, all that is left is to allow the user to add and remove tags and search using the tags.

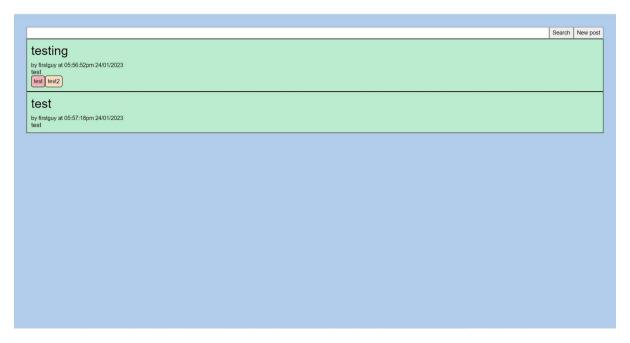
As you can tell from above, I have also learnt the importance of time management through this project. If I had implemented the tagging system after the JWT tokens did not work, I would have one more feature to present.

In conclusion, I feel that I am now better able and more confident to develop web applications. I believe that with more time and experience, I will be able to create a satisfactory product.

## **Brief User Guide**

Go to <a href="https://golden-tanuki-2369ed.netlify.app/">https://golden-tanuki-2369ed.netlify.app/</a>.

Use should see the following page that contains all the posts:



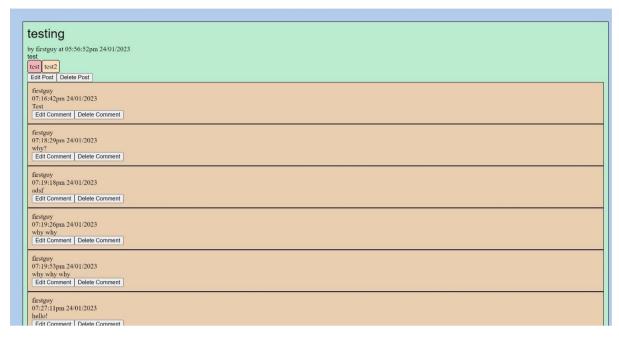
At the top, you see a search bar, where you can do a search for posts by typing in it and clicking "Search".

To create a new post, click "New post", which should bring you to the page below.

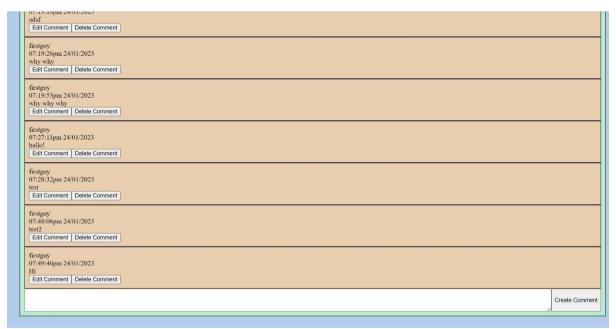


Now you can fill the title and content, and click "Create Post".

Going back to the main page, you can also click on each post to see the comments.



Here, you can click "Edit Post" to edit the post. Please to not click on "Delete Post" on the first post, as it is the only one that demonstrates how tags would look after it is implemented. As the button suggests, "Delete Post" deletes the current post.



There is also functionality to add new comments! Fill the text box at the bottom and click "Create Comment" to add a new comment. Likewise, you can click "Edit Comment" to edit the comment and "Delete Comment" to delete the comment. There is no confirm button implemented yet, so please do use these buttons with care.