Reflections

This is the second website that I have worked on. I started learning react and ruby on rails at the start of Semester 1 in 2022, I attempted the winter assignment from the previous year to create a task management system. I am glad to see that I have definitely improved from then, getting better at planning everything out before I start coding to prevent unnecessary double jobs, though I can definitely improve more on this matter. I am still spending more time trying to figure out how things work and because of that a lot of time is still spent on editing and recoding functions to work better together. I am also lacking a lot of knowledge and relevant skills regarding web security and good practise regarding data transfer and storage in the frontend. I look forward to learning more skills after getting familiar with the basics.

I also did not have time to figure out CSRF protection which I have been putting aside. The transfer of data from backend to frontend is not as efficient as I would like and I am sure there are still instances where the same information is transferred multiple times in different components although I have tried to remove them as much as possible.

I am also not really satisfied with the design of the website, I have never been great in terms of art or design. The way the components look are really basic and the design could have been so much better.

At the very least I am happy that I am able to submit the assignment with all my initial use cases all already included and working properly. I originally also wanted to try and allow users to upload images or videos on to the website but I did not have the time to reach that stage.

Website Functions

Authorisation

Users are authorised by their accounts. When a user logs in the backend will encrypt a JWT and the user will hold that token using react cookies. Whenever the user makes a request the website will pass the token back to the backend and decrypt it for authorisation.

All users have to create an account to see the content of the website.

Usernames must be unique, so that each user can be identifiable.

Filtering Topics

The topics within the website are filtered through the following ways:

1. Category (e.g. sports, hobbies, news)

      a. Categories are created by the Administrator, users cannot change or create categories
      b. Users can click on categories at the top of the home page to filter communities and topics on the site to find topics relevant to that category

2. Communities
      a. Communities can be created by users, they can also be tagged to categories (e.g. Ice Hocky / Skating can be classified both under sports and hobbies)
      b. Any user can find communities and create topics within those communities to discuss or find like minded individuals

3. Topics
      a. Topics are created by users, they can belong to categories or communities
      b. Users can see the topics within communities by clicking on the community to check its page
      c. Users can also filter topics by categories by clicking on categories on the home page

Besides filtering topics through communities and categories, users can also sort the topics or communities by upvotes/downvotes and also by the order they were created, this way users can find topics or communities that are created the most recently or are the most well received by the user base.

Sidebar

Users have a sidebar on the left of the screen

1. The homepage can be accessed from the 'home' button
2. Users can pin communities or topics which catch their interest onto their sidebar by clicking the pin icon on the community/topic. This allows users to easily go back to the topics which they are interested in.
3. Notifications will also show up here. When other users reply directly to the users comments or topics/communities there will be a notification to allow the user to see the comment that was left by the other party. The user can also click the topic to easily access the topic from the notification.

Interacting With Other Users

1. Users can leave comments or reply to comments on any topic within the website
2. Users can also like or dislike any comment / topic / community on the website
3. Users can create their own community if they want to start a group to find like-minded individuals to share their experiences or to give each other advice or just chat in general.
4. Users can see notifications when other users leave any replies, comments or create topics within their communities. This way, users can be notified when

others reply back to them instead of having to check back the topics by themselves.

Updating/Deleting Posts

1. Users can edit their communities, topics, comments and replies.
2. Users can also delete the items that they created, doing so will also delete all other topics or comments within them. (e.g. If a user deletes their community, all topics within the community will be deleted.)