CVWO Final report

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Assignment: Gossip with Go/Rails
Final Website: https://retrohub-frontend.herokuapp.com/

About RetroHub

RetroHub (initially Bluedit) is the web forum I have made in conjunction with the CWVO assignment. It uses a Ruby on Rails backend and a React frontend, styled with Tailwindcss. It has full CRUD features for posts and comments which belong to a post. It has account-based authentication with JWT with the frontend caching the auth token using cookies. It is styled with Tailwindcss and deployed on Heroku.

The Journey

Prior to this assignment, I have never touched WebDev or worked on a project on this scale. Nevertheless, equipped with Javascript skills from CS1101S and a foundation in Python before university, I was eager to get started. I spent a good portion of time before initiating the project learning Git, React Typescript and Ruby on Rails(RoR) and scrutinising the sample React app. I am thankful to have a solid work plan from the get-go after consulting seniors and googling. I started the backend with user authentication using ruby-jwt by following youtube guides and built the posts model and controller. Then I coded the frontend and made sure to initialise Git on both directories to undo errors and accidental deletions (which did happen).

Initially, backend was a breeze thanks to the boilerplate nature of Ruby on Rails. However I was quickly jinxed by my first major hurdle when I had to route comments under posts. While adding associations was easy, it took long hours of searching and testing before I found a guide to change the comments controller. Even so, I met Error 500 on my Post requests constantly along the way which was painful to debug.

Adding API calls with axios on React was initially difficult as my backend required the jwt auth token for any request, but got exponentially easier as I coded more. Another major hurdle was implementing a global state for all React Components to access information such as the current logged in user, as well as a reducer to manipulate the global state from the component. Using Typescript made it harder as I needed to be clear what data was going in and out of the global state. However, it was subsequently easy to add cookies for users to stay logged in.
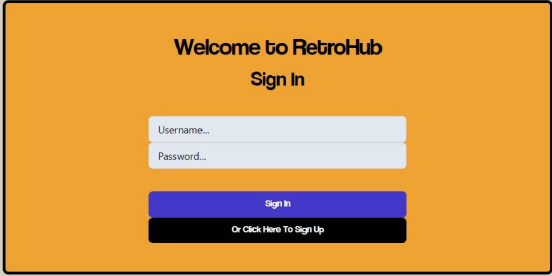
The penultimate step was styling. I decided to use Tailwindcss for more control and customizability over other frameworks and without using multiple css files. I was soon greeted by the pain of "how to centre a div", a common occurrence given that I had zero

css/html knowledge prior. Nevertheless, I eventually finished the aesthetically pleasing RetroHub. Lastly, I deployed the backend and frontend to Heroku to test it out online.
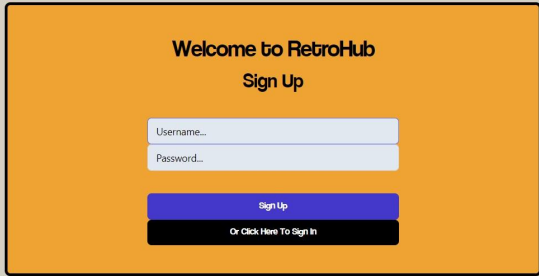
Short User Guide

Sign In/Sign Up:
Sign in with an existing user or switch to the signup page

Upon signup, a confirmation alert will appear and redirect you to the Sign In page.

Threads page:
Click on the red button to create a new post or click on the post to view it.
On the Navbar at the top: Toggle between Categories (All, News, Gaming...),
or logout at the top-right
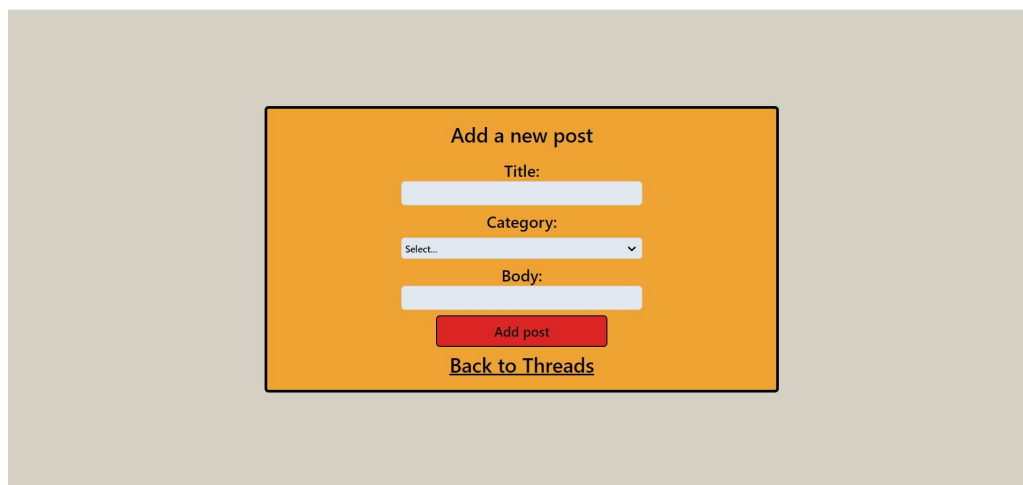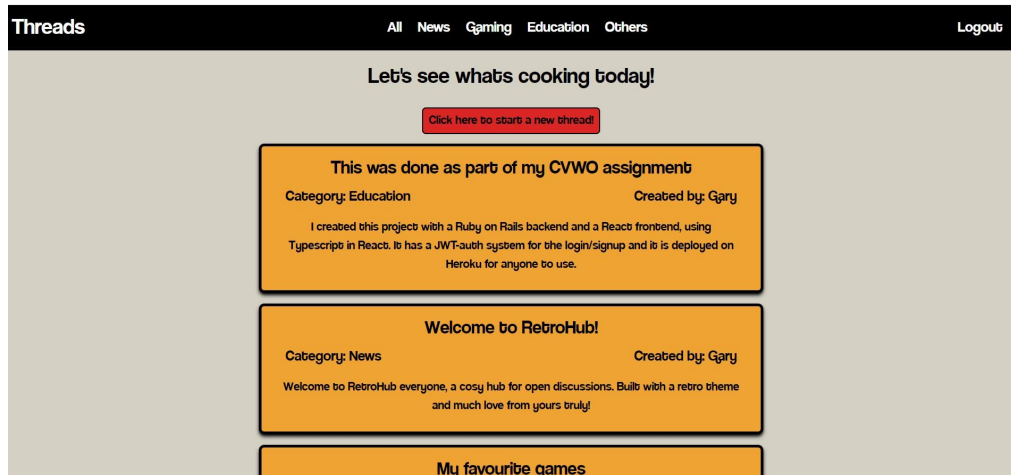
Post page:

Add comments with the red button

Edit/Delete current post or comments (only if you created them).

Navbar: Click "<<<Threads" to go back to threads or "Logout" to logout