CVWO Assignment 2022
Aim
Create a minimalist forum similar to reddit, but with the ability for users other than the author to add and vote on tags. Hence, instead of users posting to a specific sub, the community 'votes' on tags which should be attached to each post, which can then be filtered for when viewing posts.

The goal is to create a forum which removes the hassle of posting to multiple sub-forums by allowing posts with multiple tags, as well as facilitating tag discovery and accuracy by allowing readers to vote on tags. Voting on tags also functions as a system to serve more relevant and good content to readers of the forum by serving threads with more votes to the user first.

User Flow
Authentication interface
Upon launching the app, users will be prompted to either sign up or login to the app.

Two fields are required:
Username - Must be unique and will be displayed with each post or comment the user makes.

Password - 8 to 16 characters, stored as a hash in the database.

Upon successful login, users will be brought to the forum interface.

Forum interface
The forum interface allows users to view thread titles and open threads. There are a few filters for sorting threads, and users may apply multiple filters at once:

Sort by: Number of votes of the parent tag, average number of votes, and time posted
Tags: The user may select one parent tag and up to two more child tag. Only threads with all the tags selected will be shown to the user. A thread is only considered as having a certain tag if the tag has a positive number of votes.
Time: Posted in the past hour, day, week, month etc.

Users may click on any thread to enter the thread interface of that thread, or click on a "post" button to enter the posting interface.

Thread interface
The thread interface allows users to view the contents of a thread, and if it was posted by the owner, edit it. Anyone may also post comments under a thread.

The unique point of this app happens here - users may vote on which tags the thread should have, as well as add new tags to the thread (up to one tag per thread, per user). There will also be an option to vote up all tags and to vote down all tags, since tag votes also function as a mechanism to differentiate good content. A common use case may be to vote up all tags first, and then undo votes on tags which the reader does not agree with.

<u>Posting interface</u>
To post a thread, the author must enter a title for their thread, as well as a thread body(optional). They must then enter at least one tag, but can enter as many tags as they want. By default, author tags will come with 10 votes, but they can be voted out if users feel them irrelevant.

Implementation
The project will be implemented with a React frontend and a Ruby on Rails backend. For the database, I'm looking at a Render PostgreSQL Database for easy deployment on Render.

Due to limited time and design experience, I plan to make extensive use of Material-UI for the design of my forum.

Repository
The GitHub repository for the project can be found at:
https://github.com/lshaoqin/cvwo_forum