

CVWO AY2023/2024

Final Write-Up: AskWhat

Reflections

Project Overview

AskWhat is a general forum, where anyone can ask any questions they like.

Difficult challenge

I had never created a full-stack application alone before, so the task at hand felt massive. However, I decided to pace myself and work on a small portion each time.

I was fortunate to have some prior experience in React, so the frontend part did not seem too daunting initially. Yet, like any software problem, I found myself spending hours googling away, fixing bugs, and providing an attractive interface with all the required functionalities.

Despite my unfamiliarity with the backend and database, after spending some time reading up on MVC and ruby, I was able to manipulate data and send them out.

The two biggest hurdles of the development were getting the JWT token to work for authentication and deployment. These issues took days to solve as it required a lot of understanding and trial and error, but the satisfaction at the end was certainly great.

Planning and Strategy

I divided the task into smaller ones, like creating the main page and then the individual thread view. After creating the frontend GUI, I began working on the backend when I needed to make an API call to fetch data.

Each morning, I set a goal(s) to achieve by the end of the day. At night, I documented my progress and assessed how close I was to completing it, assigning tasks for the next few days if necessary. This approach ensured that I stayed on track with the project's completion.

Personal Development

This software development journey has been a rewarding and satisfying one, it gave me new confidence on tackling tough projects.

I learned the importance of contentment and adaptability. Initially, I had many implementation plans but underestimated their difficulty or the time required. Software development is perpetual, and an app is never perfect; improvements can always be made, hence the need to be content with what I have created.

For technical skills, I learned a lot about frontend and backend integration, using MVC, creating REST APIs, and programming in Ruby and TypeScript.

Future Improvements

Here are some more things I would have liked to implement:

- Responsiveness to different screen sizes.
- Email verification for added security.
- Upvoting and downvoting
- Reporting of inappropriate content
- Admin features to manage the forum.

Conclusion

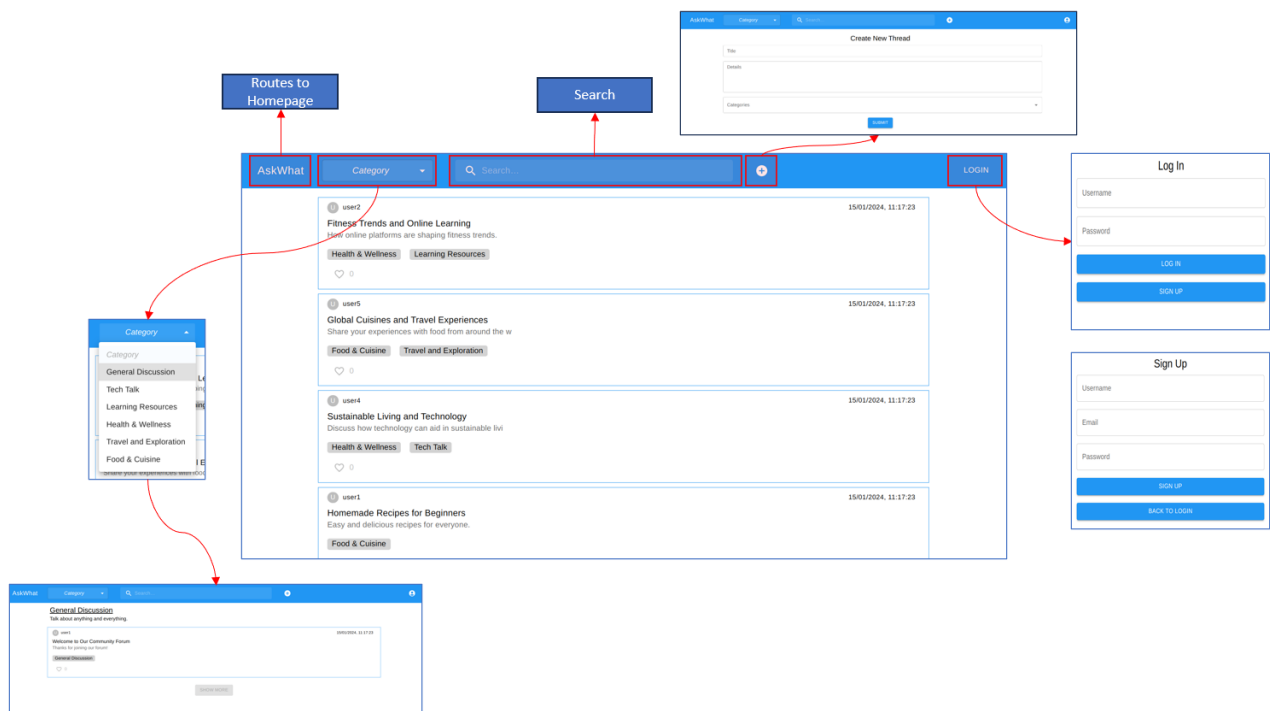
I have managed to implement everything from levels 1-4 and some from level 5 (account-based authentication and UI component library).

I am confident that the comprehensive web development skills I acquired, ranging from frontend design to backend integration, will significantly enhance my ability to develop more sophisticated and user-friendly applications for future organizations.

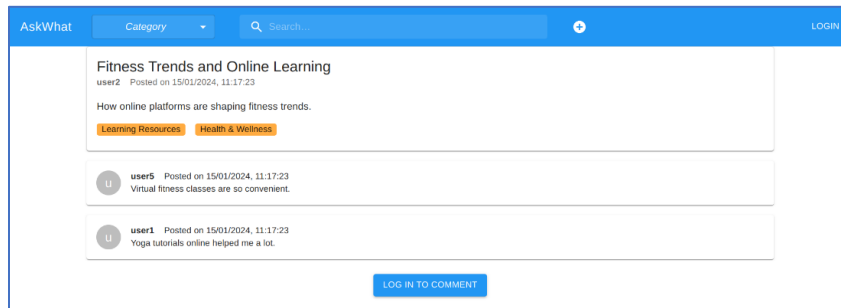
User Manual

The diagram below shows the homepage, highlighting some of its functionality and layout.

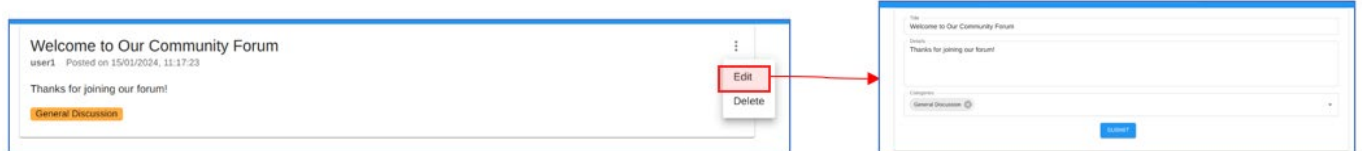
Users will be prompted to sign in when doing any operations other than reading.



Here is a single thread view; users need to be authenticated to post a comment.



For the posts/comments made by a user, a menu button appears on the right. When clicked, it displays a menu that allows the user to either edit or delete the post/comment.



Users can leave a comment at the bottom of a thread.

