I successfully set up a forum with all the basic requirements.

- There is an authentication system where users are authenticated solely by their username
- Users can perform CRUD operations for forum threads and comments
- There is a tagging system to categorise threads for filtering purposes
- React.js as frontend, Ruby on Rails as backend, built-in SQLite for the database

I managed to integrate additional features and frameworks into my final product

- Set up redux to store the details of the forum posts
- Cross-page navigation using React libraries

I aim to finish the sales page as a future project.

## **Learning points**

- Redux has a lot of boilerplates involved. Very tedious for a small CRUD forum like this
- I should plan out exactly what functionalities I want to build and what parameters are required for my application before diving into the coding
  - o It was extremely difficult to add in even a single parameter (such as username of the creator of the post) to my database after the initial database was constructed. Overwriting the old one leads to errors, and a lot of small files need to be edited to correctly store the data of the new parameter
- I really appreciate how React.js allows me to spread my code across multiple folders and scripts, keeping everything very cleaned and organised
  - When I only used HTML without additional libraries for my personal project before, everything was jumbled together in one page, and it became incredibly difficult to debug and understand what was not working.

## **User Manual**

- To display the webpage locally,
  - o Go to the main project folder **orc4nic-juice** and run
    - rails s
    - It should run on localhost:3000 by default
  - o Go to the frontend subfolder and run
    - npm start
    - It should run on localhost:3001 by default, this is important because I only allowed access from localhost:3001 in my scripts

- This is an alterable parameter that can be changed when the webpage gets deployed
- There are 3 internal pages in my webpage
  - The home page gets displayed by default and it is a static page to welcome the users
  - o The forum page contains the authentication and CRUD mechanics
  - o The sales page is a for a future project