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Project Individual Report

The app's purpose is to create a Recipe website that allows the user to browse, upload, and share recipes. We build this website through the MERN stack, composed of four different technologies: MongoDB, ExpressJS, ReactJS, and NodeJS.

For the client, we have incorporated modules such as Material-UI to help us better organize the code to make it more user-friendly and aesthetically pleasing. As for the server, we constructed REST APIs and utilized various tools: google_oauth to allow users to log in to the website via a google account, and mongoose to connect more systematically to the mongoDB database.

The app fulfills the three basic requirements specified in the assignment. Our dashboard page displays dynamic data, which shows the newest uploaded recipe every time someone uploads a new recipe. The search bar on the app bar allows people to search through server-side data; when you input a recipe name in the search bar, the dashboard will display recipes accordingly. The upload button on the website's top right also allows people to upload their recipes through a form.

As for the three features, we have comment, user, and tag. When you access a specific recipe through "Learn More," the webpage will query its ID and route to a unique recipe page. You can then see all the information about the recipe and the comments it has. On a recipe page, you can comment on the recipe by just typing into the textbox and click submit. This then brings in another feature which is the user. The user represents the identity of the person who is currently browsing the website. Each comment or recipe the user uploaded is user-specific and will display the user name.

You can also search up recipes that different users upload by typing the username in the dashboard page's search bar. Lastly, we have tags. Whenever a user is uploading a recipe, he/she will have to select a tag for the recipe. We can then sort the recipes in the dashboard through tags. The tag system allows the user to organize the dashboard better and categorize each recipe.

My contribution to the project mainly revolves around the back-end. I designed the database schema of the website and constructed multiple REST APIs that connect with the front-end. These APIs include retrieving a list of recipes for the dashboard, uploading recipes, retrieving comments, posting comments...etc. Additionally, I also helped develop the search function for recipe name and user name, and functions relating to tags. I also helped to merge the front-end and back-end code of the dashboard and the upload recipe form.

A few challenges our team faced were organization issues, including problems with timezone and each member's familiarity with the technology we are using, resulting in us not finishing tasks before our set up deadlines. Other notable challenges include the usage of Git. Although I have used Git before, a few others were new to it. This eventually leads to multiple mergers and communication problems that we have to handle from time to time.

If I have the opportunity, I would like to include the ingredient feature we originally planned to include. This feature allows the user to select multiple ingredients in a sidebar. The dashboard page will display the corresponding recipes that have these ingredients according to the ingredients you choose. Furthermore, I would like to allow the user to post images for their recipes and display mages in the dashboard. I believe this will let the website look more vibrant and aesthetically appealing.