CMPT 470 Project Overview

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Junchen Li:

The following is the real me. For my knowledge reserve, I have been exposed to Java, so I can still apply JS. I am learning the course of database CMPT354 and did a web project once in CMPT 276, so I have been exposed to it, but I cannot skillfully use it. For the framework (react) used in this project, I need to re-learn them. At the beginning, I first set up the team repository as required and proposed using Express as the backend framework in the first team meeting based on my previous experience. Jason and I were responsible for the front-end, using the online tool to design the initial UI sketch. I designed the main look of the front-end based on some ideas of the network. Later I designed the layout of almost every page. I designed the first version of the search bar for the first time based on locally "book data", and added a scroll wheel design according to the layout settings of the left and right parts. By using foundation, a grid design in the main page that can be changed according to the size of the page is designed. And added the recipe name and description part of the database to the main page. Added the function to omit if the description part is too long. Created and designed the detail page of each recipe, and imported the specific details of the ingredient list and ingredient list by filtering unnecessary symbols. In the later stage of the project, I worked with Jason to add the URL of the recipe picture to the database, and ensured the normal display of each picture (some recipes may not be able to display pictures, mainly because there is no information on these foods). I designed the part about the comment area and modified some back-end things to show the details. Added the uuid of the comment as the only primary key and added the function of deleting comments together with Benny. I like to think about how the overall project can be designed to make the user experience better. I also added a number of user-friendly designs.

Benny Zhao:

In my opinion, he made the most contribution in our team. He built the basic environment of Express and React in creating a complete repository and completed the establishment of basic files. After that, he finished writing the Docker file and enabled us to deploy a Web app in a more production-ready way. Benny, Jay, and Khorshid then set up a back-end database using MySQL (the exact job assignment is not clear). After the establishment of the database, Benny added some API endpoints and routers that

they can call the database. In addition, some file structures of the project have been sorted out by him, such as adding some elements that can be statically loaded so as to avoid the tedious loading time every time. Benny has also updated the original search Bar so that recipe names can be retrieved faster and better. Then Benny added "Ngnix" to the project and deleted some unnecessary files to further improve the cleanliness of the project. Benny was also a warm-hearted team member. He helped me solve the problem that the deletion function in the comment section could not capture the uuid correctly. He also helped Jason and Jay with their questions about the search bar on the left.

Benny had more professional knowledge (in backend part) than us, so I would ask him any questions. and he would help me very patiently. Benny never misses a meeting and is always active in all aspects. I don't think Benny is like a leader (enforced team meetings, deadlines etc.) He's more like an upperclassman, helping us to improve together.

Jayasurya anirudh Tatikonda (Jay):

Jay is also a person who is very good at back-end databases. He has done a lot of work together with Benny. When Jay and I discovered that the original database was not well used and expressed more information about the recipes, after discussion, Jay took the initiative to find and update the new recipe database. The new database can access part of the pictures of the recipes and can also query the nutritional elements contained in each recipe. Jay helped to update the database and modify some codes so that the database adapts to the existing functions. Including how to extract the recipe and display it on the main display page and the page when the ingredients are selected. Jay also helped Jason solve the problem of searching on the left and also helped me with the problem of extracting pictures. Jay proposed and improved the idea that search name of the recipe in food.com website and extracting their corresponding pictures. Jay helped me build a database of comments section and helped me write some API endpoints that I could easily call them.

Jay is also a trusted teammate who knows the back-end very well (databases, SQL query statements). He always takes an active part in group tasks and always completes them almost perfectly.

Yu Yang Shi (Jason):

Jason was the first friend I met in this course and joined the group as a matter of course. He and I are mainly responsible for the front-end stuff together. He modified the file structure of the front end to make it possible to separate the components of each part more neatly. In the later stage, he completed the search bar on the left to search for ingredients and worked with Benny and Jay to improve and modify the search bar. Jason also added a list of ingredients to make the user's functions more comprehensive. He also helped me in the later stage of the project to complete the addition of the picture URL in the recipe database, and did pair programming with me.

Jason is a trustworthy teammate. He can always help me. When there is a problem, he can calm down and help me substantively. Jason is an active participant in various activities and is good at finding and solving problems. He and I often do pair programming together, so I know him very well. He is also a trustworthy teammate and a very warm-hearted person. To be honest, he was unfamiliar with everything before taking this course and he never did web project before, but he could quickly keep up with the speed of the group and finish him work seriously.

Khorshid Vahidi:

I don't have a lot of communication and contact with her, so I just said that I know the tasks she does. Khorshid first created the content of the back-end database with Jay and Benny. I'm not sure what she did because there was no feedback from her Gitlab. Perhaps the idea was provided or passed directly to other team members for submission. In the later stage of the project, she perfected the function of searching for ingredients on the left. It is a search result that can display ingredients that contain ingredients and is displayed on the right page.

She can often help to invigorate the atmosphere of the discussion in the group, and can often elicit topics and initiate discussions. She is always a lively person in discussions. She has not missed any discussion meetings.

Some Future Work and Survey of Current Alternatives:

First of all, from the perspective of users, we need to improve more formatting issues. For example, when the search results on the left and right sides are displayed in the storage section or the search bar on the left and right sides, the search results cannot be displayed through the bottom element. This makes the overall layout very rigid. Secondly, we need to improve the structure of the database. The current database seems too cumbersome. Although it can still be used, it is not optimal. There is also the problem of storing pictures for each recipe. The current method is too complicated. In fact, you can use the crawler method to link pictures from other websites, but due to time issues, we did not consider this solution. We also need to add more functions at the same time, such as setting up a comment area in each recipe or adding some related to parts. At the same time, the distribution of ingredients on the left side also needs to be more flexible, showing more search results instead of just ten recipe's results. We can also add some filters, and we can get some recipes based on food intake. Ideally, we could create a calorie calculator that optimizes recipes based on users' daily intake. Or we could add the ability to filter by alphabetical order. We also need to think more about security issues, such as injection crises in input boxes, which need more work to avoid.

There is a big difference between what we have done and the current recipe recommenders. I set the website https://www.supercook.com/#/desktop as our example. First of all, the same point is that we can all do the most basic search for recipes and show them to users well. However, the problem is that we cannot display data elegantly, in other words, it does not give users a good visual experience. In contrast to this, we lack the option to choose different languages, as well as the part for users. Our team has considered this issue. We think that the user login part is not very useful. It may store search records or favorite recipes but it is not useful, so we chose to abandon this part. Secondly, we lacked more choices for the ingredients, but only showed some high-frequency options. In the right part we are missing a filter, which is also mentioned above. On the right part, online version will show all the search results instead of just a part of the recipe. All the links to their recipes will link to websites on other networks, which we did not accept. We have our own style of recipe details page; the same style

can give users a better experience instead of linking to an insecure website. We also lack features such as "favorites" and "syncing to various social media or platforms". We have used the comments section as a substitute but we can expand it further in the future. For the existing comment section, we need to add more actions such as commenting on existing comments or modifying the previous comments that user just posted and so on... In the database part, we also have a gap in the choice of some databases. The database we choose is free, so there is not much valuable information. There are also many paid and comprehensive databases on the Internet. This question can be used as an optional upgrade option.

Finally, I want to say that this semester is very busy for every team member. Everyone has a lot of exams to review, and a lot of homework to complete. In fact, people spent so much time for meetings and coding is something I think everyone should be proud of. I think we are still a long way from a real web page that can be uploaded to the web, (Think about different problems from different perspectives) but each and every one of us tried to contribute to this project. We can't say that we did it perfectly, but at least we have done our best.