CMPT 470 Project Overview Group 13

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## **Design and Implementation**

In university, students often have hectic schedules juggling between family, school, part time jobs, and many more. Sometimes, we might not even have time to think of what to eat for lunch or dinner. Our group decided to make a website for students, by students, that would help with everyday cooking. Although the initial focus of the website was to aid a smaller user base, the audience could potentially scale into a much larger population. With that in mind, we chose Django for the project as it fit well with the size of the project. As a start, we decided that there were several functions that the website must have – account management, recipe management, ingredient tags and recipe search.

#### Models

We first began by building core models of the website. The *recipe* model would include recipe, steps, quantity type, ingredient, and category which would be linked by recipe ids. The second model, *accounts*, contained user (user information) and verification (for verifying an account).

### **Account Management**

Users are able to sign up for our website by providing basic user information such as name, email and a password. Users are able to change their account information under account management. By providing users with accounts, we can implement other features such as recipe favorites, comments, ratings and more.

#### **Recipe Management**

Recipe management is the largest portion of the project. Users are able to create recipes, edit recipes, favorite recipes, comment on recipes and share recipes. As mentioned previously, accounts can keep track of information such as recipes a user has created, users' favorites, and user comments.

Our site features tips, suggestions, and a nutrition guide. Not sure what to eat for dinner tonight? No problem. There is a recipe dropdown menu that will show you all the dinner recipes. Have some ingredients but you do not know what to cook for lunch tomorrow? Our website includes a search function that allows users to search by recipe names or ingredients.

#### **Implementation**

Django was a perfect choice for the size of the project. With time constraints and other responsibilities, Python minimized the amount of time it took to learn the framework. The way that Django manages each application individually made it convenient to work on applications without having other code in the way. Models, URLs, views, forms all had its own file in each application. Such compartmentalization and organization made the framework extremely comfortable to work with. A front-end framework like Bootstrap can be easily integrated into Django, which is what we did. Our group members had some previous experience with Bootstrap so it was our technology of choice to make our project aesthetically appealing.

### **Future Improvements**

Originally, our group wanted to implement an algorithm that would suggest recipes based on a user's recent activity. Due to time constraints, not only were we not able to complete all the features in our original proposal, we did not have time for such a complex algorithm. We also wanted to create a nutrition tracker which would track the amount of user intake. Such a feature would be able to help our users stay healthy.

### **Alternatives**

Our website is similar to a lot of existing cooking websites. Like other sites, we provide recipes with listed ingredients and steps, however, the one difference between our site and commercial sites is community involvement. Commercial sites often include their own recipes, or recipes that are provided by professional cooks. They often include cooking video tutorials as well. With our project, users are able to interact with other users by sharing their own recipes, commenting on others' recipes and many more. For example, *Cook for your life* lacks such features. Although they have a blog integrated onto their site and cooking videos, which we don't have, community involvement is as little to none. We believe that with community involvement, people can encourage others to improve their diet for whatever goals our users may have. Of course, our website is not as refined but I believe that commercial cooking websites should consider including the ability to interact with other users.

## Responsibilities

Jitin – Account management was his responsibility, but Jitin worked on everything.

Jason – media sharing, recipe image upload, recipe comments

Patrick – implementing favorites, recipe and ingredient based search, recipe categorization

Priyanka – designed the appearance of the site with Bootstrap

Indys – user sign up, images, writing pages to fill the website

My main responsibility for the project was recipe management. I created the initial skeleton of recipe management and added features such as adding recipe, editing recipe, and recipe authentication. Unfortunately, during the last week before the project implementation was due, I was hit with an influenza that had mutated which left me hospitalized in case of meningitis. I was unable to continue working from the hospital as they performed numerous procedures on me which left me unable to walk or sit.

# **Special Note for Professor on Responsibilities**

I understand this is a project overview, but I would like to first thank Jitin for all his hard work for the shortcomings of our group, and express some thoughts and feelings about the group.

At first, I was afraid that I was in another group full of slackers because of the impression they gave me during tech evaluation. I personally worked on the tech evaluation presentation and demo all by myself, with the exception of the power point and a bit of the summary. While the group was one man down (me), and with a minimal amount of work being done, problems and bugs caused by Priyanka and Jason, *Jitin and Patrick pulled and extreme amount of weight*, especially *Jitin*. Jitin completed the work I was responsible for, and not only that, he started working on everything that other people were responsible for as well because work output was simply not enough.

In my entire educational career, I have never seen a group argue because people were not pulling their weight. Students often keep silent, however, my group had arguments because Jitin felt like he was doing all the work. I believe that this incident in itself, is enough to explain how much work Jitin had done for our group.