CS 411 Project Proposal

Team: Q-Team124-triggered

Ruchika Biswas (rbiswas4@illinois.edu)
Thihan Moe Kyaw (tkyaw2@illinois.edu)
Avani Puranik (avanip2@illinois.edu)
Serena Tzeng (stzeng2@illinois.edu)

Data

Describe what data is stored in the database. (Where is the data from, what attributes and information would be stored?)

The original data we will work with is from the Food Recipe Kaggle dataset: https://www.kaggle.com/datasets/snehallokesh31096/recipe. It includes attributes such as cooking method, type of cuisine, images, ingredients, prep time, recipe name, serving number, and tags. We will add ratings and reviews to this dataset and may add additional attributes as well.

Basic User Functions

What are the basic functions of your web application? (What can users of this website do? Which simple and complex features are there?)

Core Functions: Users can

1. **Search** for recipes using recipe names (basic search)
2. Search for and **filter** through recipes (advanced search)
    a. Filter by any combination of the attributes listed above (e.g ingredients, prep time, type of cuisine, serving number, ratings, etc.)
    b. Filter by tags like “vegetarian”, “vegan”, “peanut-free”, etc.
3. **Rate** recipes (out of 5 stars)
    a. Possibly more detailed rating components as well (clarity, taste, prep time, etc.)
4. **Review** recipes
5. **Add/edit/delete** recipes that you created
6. Get **suggested** recipes based on what ingredients you already have and past recipes that you have liked
    a. Be able to input ingredients that you already have and get suggested recipes that you could make immediately or with as less ingredients as possible
    b. Possibly with more customization options as well

Additional (if we have time): Users can

1. **Save** recipes to “My Recipe Book” to look at later
    a. Possibly different collections of recipes (Favorites, Want to try)

2. View **history** of recipes that you have used
3. **Share** recipes with friends
4. **Follow** a recipe creator or collection

Creative Component

What would be a good creative component (function) that can improve the functionality of your application? (What is something cool that you want to include? How are you planning to achieve it?)
Some creative ideas that we were potentially thinking about implementing are recipe suggestions, an “I’m feeling lucky feature”, and/or some type of visualizations. We were also thinking of making more ‘tailored’ search results by putting the higher-rated recipes near the top for a given dish, and collecting user data to sort each search so that we put the items that they are most likely to click on top.

An “I’m feeling lucky” feature would be similar to the previously mentioned feature, except do the opposite thing. This would give users things that may be out of their “comfort zone” to help them in expanding their food palates. This would be done by finding recipes that have a lower likelihood of being clicked and outputting those results at the top. The visualizations would be aimed more towards users who have published recipes, to allow them to see how much activity their recipe has been getting over time.

Project Title

Eating My Feelings

Project Summary

The goal of this project is to create a community based website where each person could upload their recipes so other people can see it. When a recipe is posted, the other users can rate the recipes and comment on what they think about it. People can also filter the recipes by their dietary restrictions or their allergies.

Description

Description of an application of your choice. State as clearly as possible what you want to do. What problem do you want to solve, etc.?

We want a platform where home cooks can share their recipes online so people can share their ethnic or creative recipes to other home cooks. This way, many homecooks can try new recipes they have not cooked before.

As an author on the website who writes recipes, the user should be able to write information on recipe pages such as cooking time, ingredients needed, utensils needed, type of cuisine, dietary choices (vegan, gluten-free), instruction of recipe and so on. The user must tag their recipe to a specific ethnic tag so that site users know where the recipe originated from.

As a person who would like to look at recipes, the user should be able to rate the recipes and give suggestions to the recipes that the others have created. On top of it, we would like to include a “I am feeling lucky” feature where the user will be introduced to a recipe with not many ratings so they can try unique recipes.

If time permits, we would like to implement a visit history database of sites that the user clicked on and create a recommender system based on the pages they visited and ratings they have given.

Usefulness

Explain as clearly as possible why your chosen application is useful. Make sure to answer the following questions: Are there any similar websites/applications out there? If so, what are they, and how is yours different?

Allrecipes is the best example of what we are trying to achieve. Our project would be based on making a very similar website as Allrecipes so we can learn how their database might work in a simplified version. We can add more filters so that people can filter recipes based on their country of origin if it is not a new (contemporary) recipe. Therefore, one feature that will be highlighted in our app will be asking for the cuisine type to make it easier to find specific ethnic foods.

Realness

Describe what your data is and where you will get it.
The dataset we are using is from kaggle, and the link to the dataset is here: https://www.kaggle.com/datasets/snehallokesh31096/recipe. The dataset contains many recipes and provides the following descriptions for each recipe: cooking method, cuisine, image (optional), ingredients, prep time, recipe name, servings, and additional tags.

Functionality

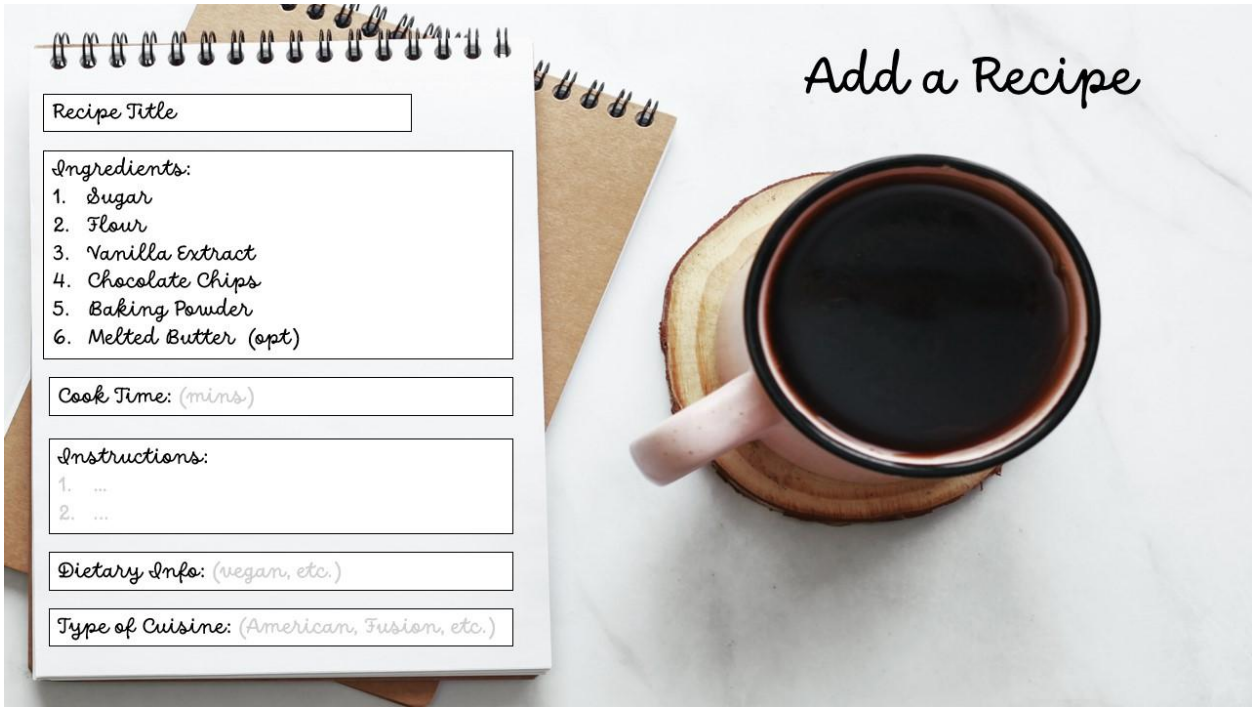
Description of the functionality that your website offers. This is where you talk about what the website delivers. Talk about how a user would interact with the application (i.e. things that one could create, delete, update, or search for). Read the requirements for stages 4 and 5 to see what other functionalities you want to provide to the users. You should include:

> Users will be able to search for recipes by their title, and will be able to apply filters to help target specific dietary concerns. The output will only show the filtered results. The recipes will be displayed and users can click to see what the recipes look like and what

ingredients they use. Users can add their own recipes and the information they provide is also the information that other users will be able to see. Users can add new recipes, update old recipes, or delete recipes they have already created.
Additionally, we wish to implement a rating feature such that users can rate a recipe based on their personal user experience. The scale will be 1 - 5 stars, and users can change their rating on a recipe if they wish.

A low fidelity UI mockup

What do you imagine your final application's interface might look like? A PowerPoint slide or a pencil sketch on a piece of paper works!



Project work distribution

Who would be responsible for each of the tasks or subtasks?
List of the person responsible for which exact functionalities in section f. Explain how backend systems will be distributed across members. Be as specific as possible as this could be part of the final peer evaluation metrics.

Based on the tasks mentioned in the description of the functionality of our application, we plan to split the work in the following manner:

1. Serena Tzeng will complete the necessary functionality for inserting and deleting recipes from the database.
2. Ruchika Biswas will be responsible for completing the logic for updating an instance of a recipe based on the user who created it.
3. Avani Puranik will complete the task of the search functionality by allowing the user to search for recipes by name.
4. Thihan Moe Kyaw will be completing the creative component of the application by implementing a rating feature so users can provide feedback on recipes they have tried on a scale from 1-5.