Daily Recipe Project Proposal

CS157A Introduction to Database Management Systems

San Jose State University

Team 5

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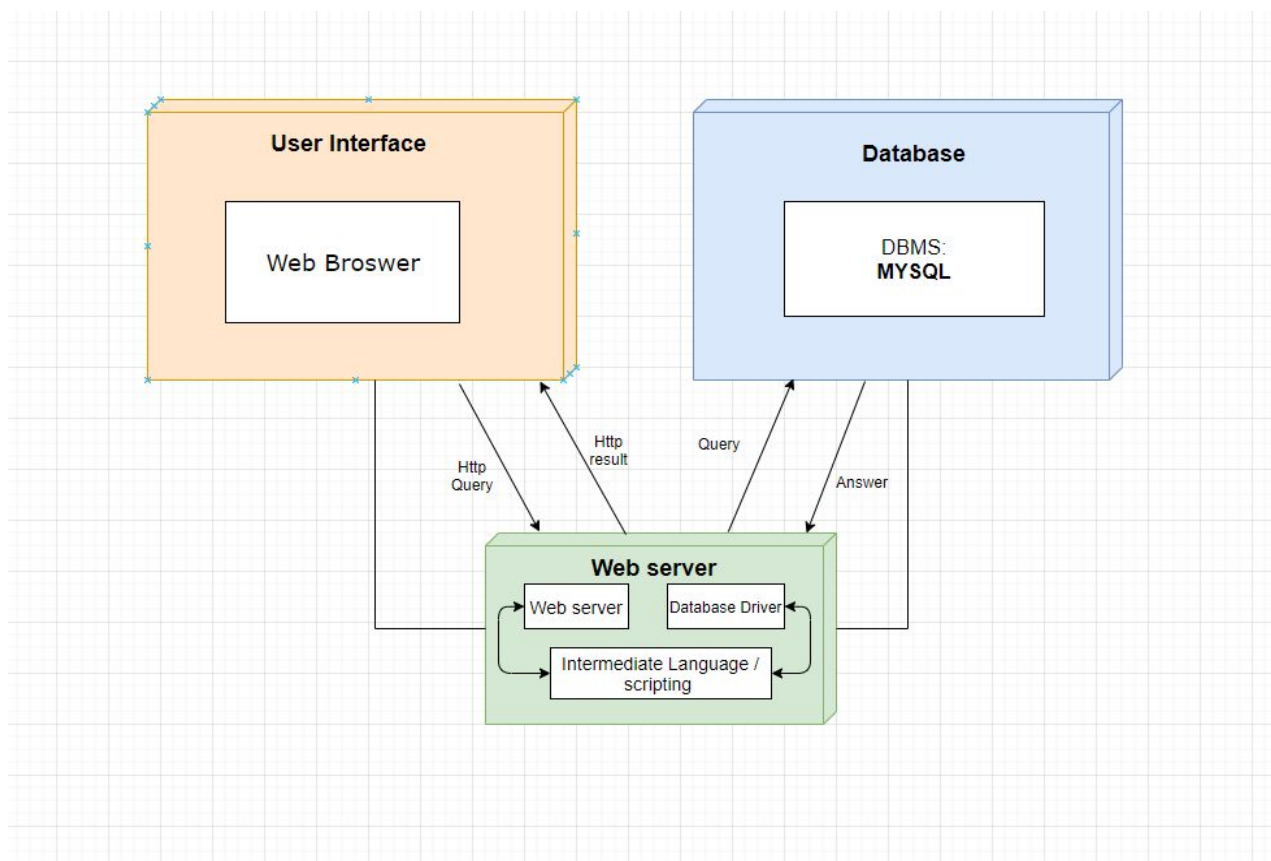Soyeon Wang

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Project Description

This project is a web application built by 3 Tier Architecture(Database, Web Server, User Interface). The idea of the project aims to give people a chance to improve their cooking skill. The reason why we are motivated to make this app is that most of the restaurants are closed during the pandemic. Our idea is to develop recipe organization software that would allow users to store, search, organize, email, print, and publish their personal recipe collection. The stakeholders would be people who have passion to learn how to cook perfect food or have an online tuition about cooking. The application domain is a non-profit domain where we provide a web platform to allow people to share recipes. The goal of this project is to produce a product which will simplify the task of recipe organization while offering a pleasing format and design to help people pass through this difficult period of time.

System Environment:

3 Tier Architecture

Hardware and Software used:

Apache tomcat

RDBMS:

MySQL Workbench 8.0 CE

Application Languages:

Java, SQL, HTML, CSS, JavaScript

Functional Requirements

Functions:

Login in / Sign Up:

- Users will be required to sign up for their own accounts to get access to the website.
- Users will be able to login to their own account to visit the website.

Search for Recipes:

- Users will be able to search for a recipe using the title as a criterion. The search functionality will provide the users with a shortcut to find their targeted recipes if posted before by the users.

View Profile:

- Users will be able to view their profile that their information of username, age, and country are displayed.

Edit Profile:

- Users will be able to edit their profile, such as editing the username and other information. Also, a changing password option is provided in this function.

View Recipe:

- Users will be able to see the recipes posted by other users. In other words, the user will be able to access the Recipe Forum, where other user's recipes are posted and ordered by date of creation.

Create Recipe:

- User can create a new recipe with a list of ingredients, time of preparation, photos, personal comments about your new recipe, process of preparation,
- User can create their own recipe with the elements they want to add, but the most important will be the name of the recipe, the ingredients, and process of preparation

Subscribe / Unsubscribe:

- Users will be able to subscribe another user who uploaded their favorite recipe, so they can follow up on his/her newest updated recipe. Also, an unsubscribe option is provided for users to unfollow whom they are no more interested in.

Report an inaccurate recipe:

- Users will be able to report recipes that have cross contamination or that are harmful for human consumption. We need to make humans aware of what they are eating because there are many animals, plants, and other ingredients that are not suitable for intake.

Favorite Recipe:

- Users will be able to add their favorite recipes to a list.
- Users will be able to have a list of favorite recipes, so they can just look at their list quickly.
- Users will be able to delete a recipe from their favorite listings.

View My Favorite Recipes:

- Users will be able to access the recipes that they added in their favorite list.

Delete Recipes:

- Users will be able to delete their own recipes that they already posted.
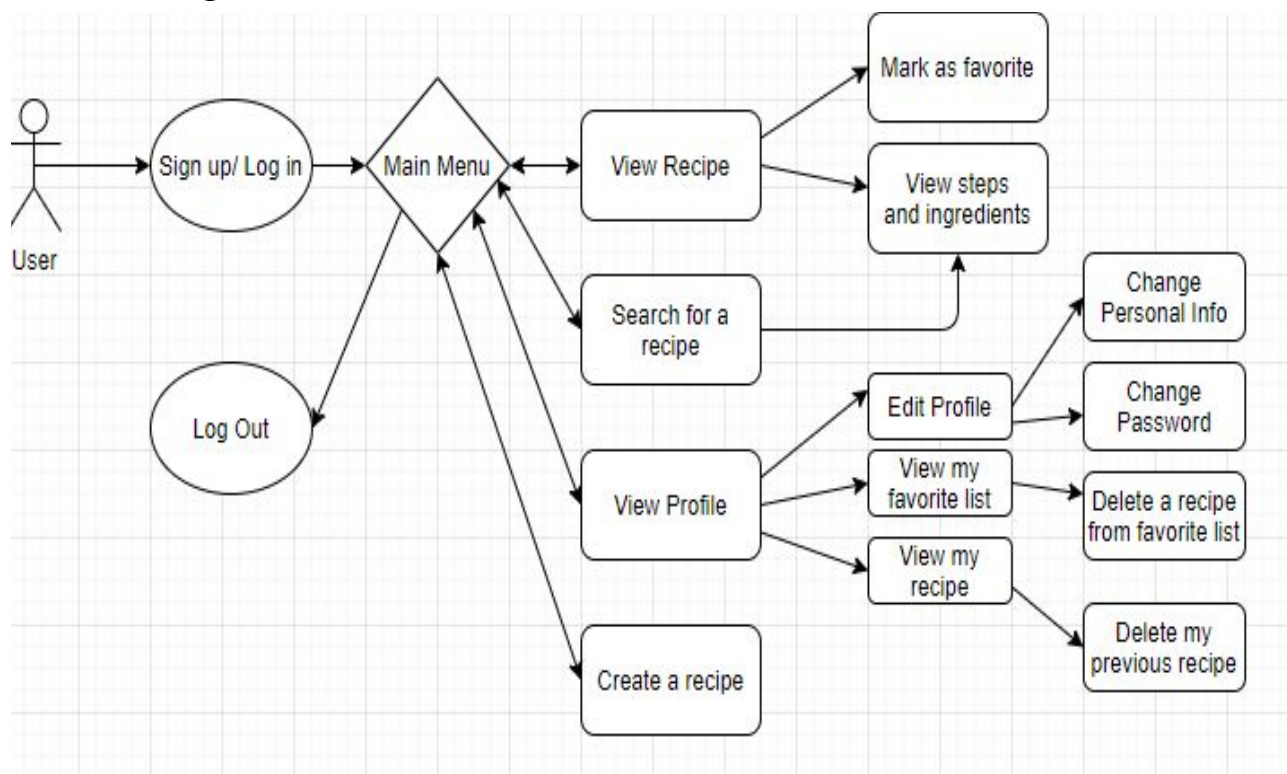
Shop:

- This website can link to other websites so users can find a place to buy the ingredients or utensils for their kitchen.

Share the link:

- Users can share the link of their recipes on social media such as Facebook, Instagram, etc.

User Flow Diagram:

Non-Functional Issues

Graphical User Interface:

For graphical user interface, HTML and CSS will be used to create an intuitive interface. Our goal of GUI is to make the program practical and easy-to-use. GUI will be not only plain and simple but also complicated in specific parts. Users are supposed to register an account through sign-up page and sign in to write their own recipes. To create recipes, users are supposed to input the required minimum field such as steps and ingredients. In those fields, users can input many kinds of ingredients and cooking process as specific as they want. Recipes can be modified and deleted by the writer. Also, users will be able to search the recipes based on the name of foods and the ingredients.

Security:

To keep personal information secure, users will be asked to sign up with an unique username and strong password. Also, users are supposed to provide their email for the verification purpose. Username will be used in public for the interaction between each user. Passwords will consist of a combination of various characters with complicated requirements to make it strong enough to protect users against hackers. Personal email used for the verification purpose will not be used in public in our project. Alerts and notifications for the users will be sent to their email by system based on the users' preference.

All users will be able to access only their own information after signing in. Besides that, it will be accessed when the system prompts such as sign-in activity.

Access Control:

All accounts and information are saved securely, and uploaded recipes are also considered as personal posts. Administrator privileges are modifying inappropriate words in recipes, deleting inappropriate recipes and changing inappropriate username. Administrators are not allowed to access users' personal information directly or change users' own recipes.

Users can create or modify their recipes, view or search other recipes and mark them favorite, and so on. However, there's nothing more than that for the users.