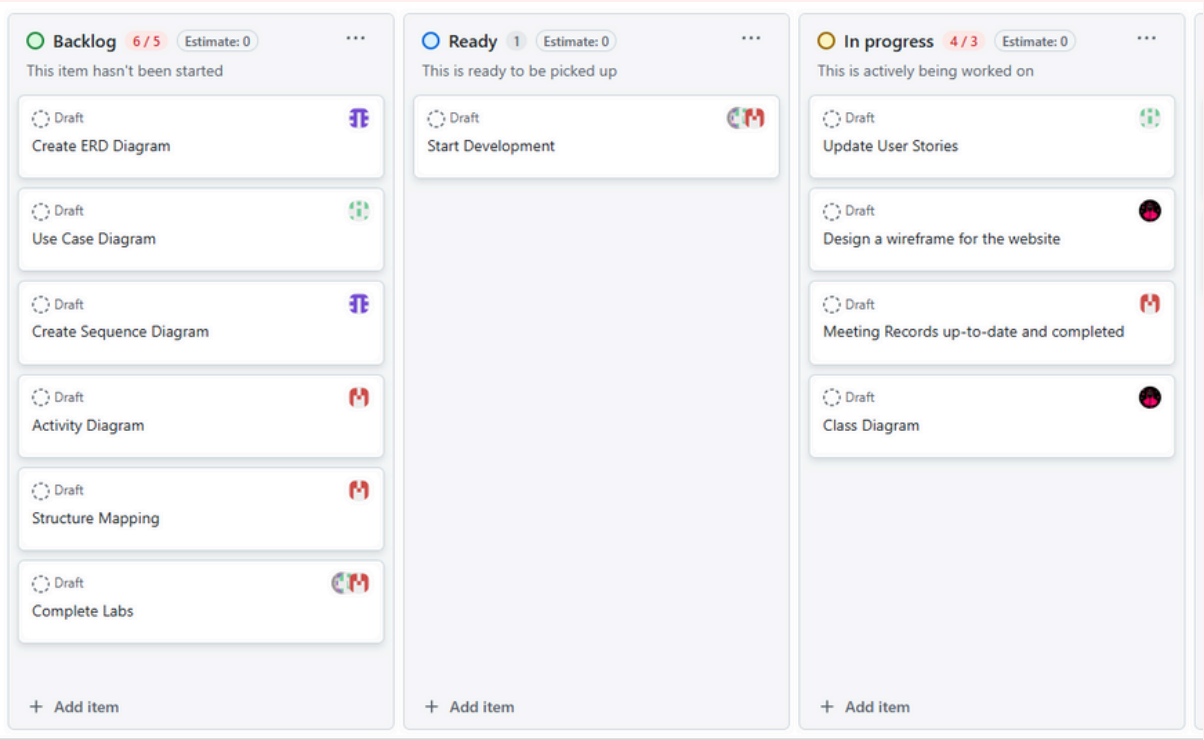
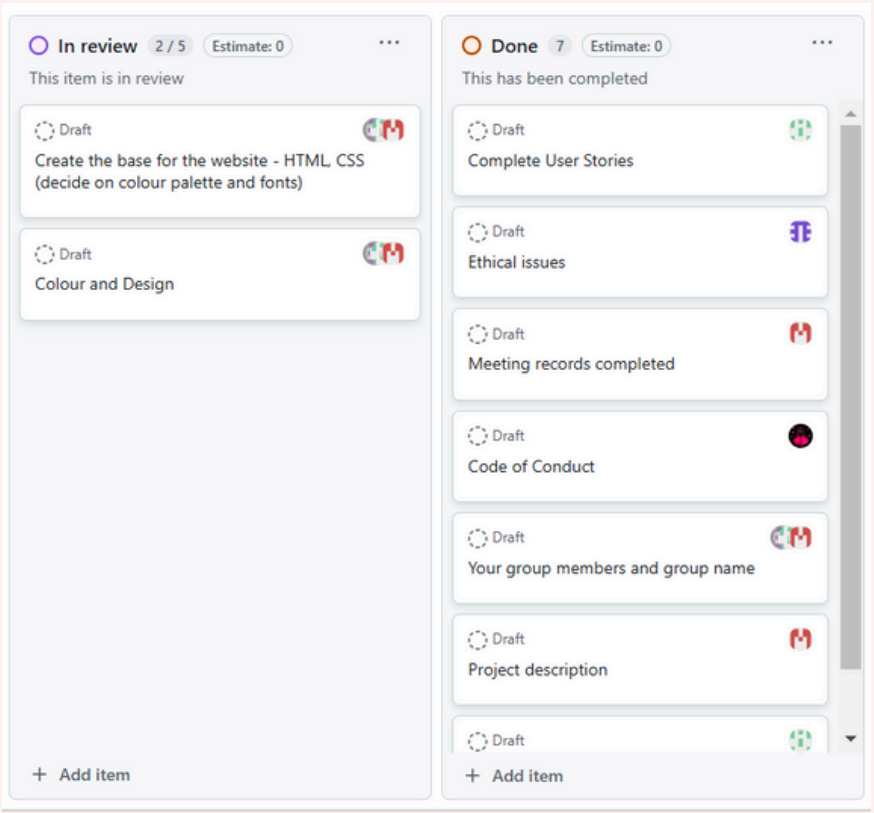
Contents

Overview

For Sprint 2, we will outline the application's features in the form of user stories, present use case diagrams, wireframes, and an ERD diagram. Additionally, we will showcase our updated Kanban board, along with the chosen colour scheme and design concepts.



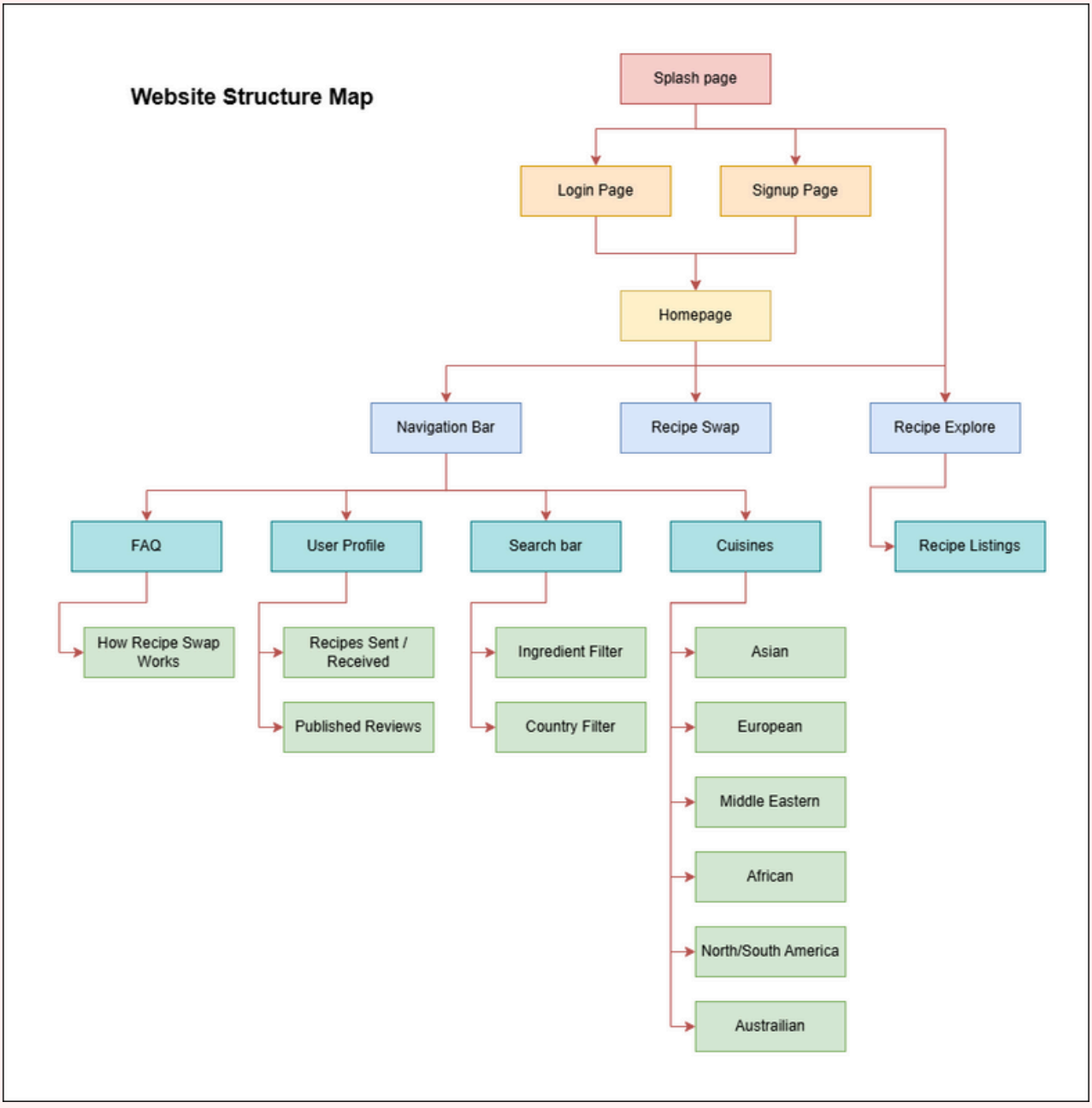


Design Outline

The Recipe Swap platform uses a bold orange, red, and white colour scheme to create a warm and engaging user experience. Red and orange highlight key actions, while a white background ensures readability. Dark red text provides contrast, and gradients in headers add depth. The grid-based layout, inspired by MVC principles, ensures scalability and responsiveness across devices. A mix of serif and sans-serif fonts enhances readability, balancing professionalism with a fun aesthetic.

Navigation is intuitive, with global cuisine categories, search, profile, and dark mode toggles, and a dedicated Recipe Swap section. The swap feature follows an MVC approach, where users submit recipes (Model), swaps are matched dynamically (Controller), and available trades are displayed (View). Inspired by Pinterest and AllRecipes, this encourages user interaction and engagement. The design prioritises usability, scalability, and a visually striking experience.

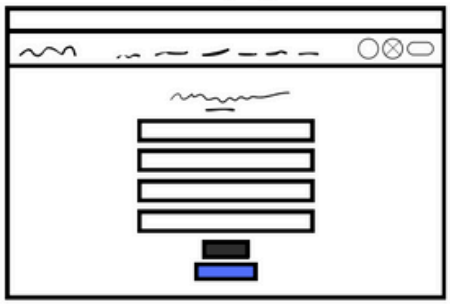
Structure Map



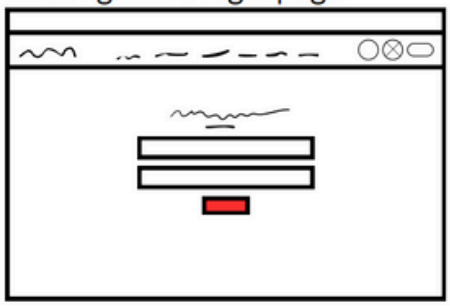
Wireframe

Low Fidelity:

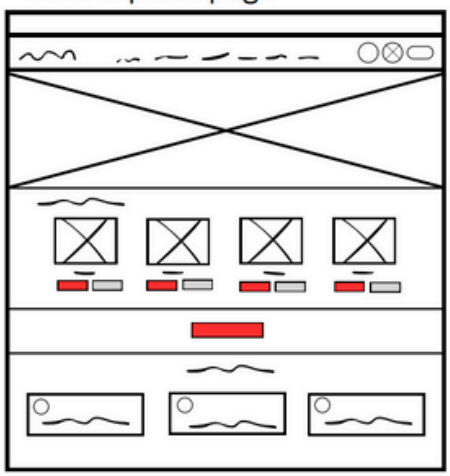
Create account page



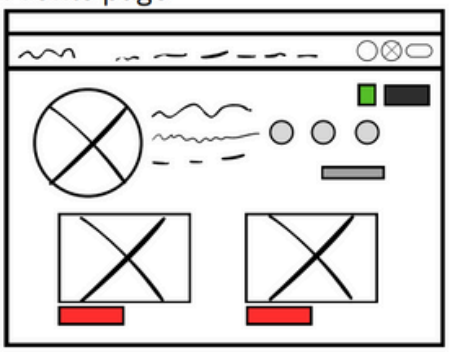
Existing users login page



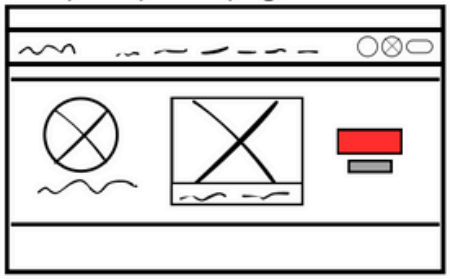
Main explore page



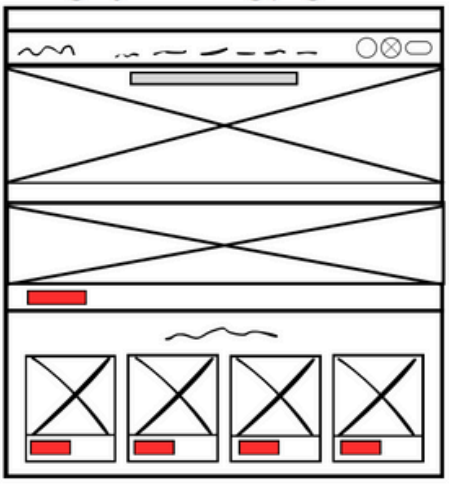
Profile page



Swap Requests page

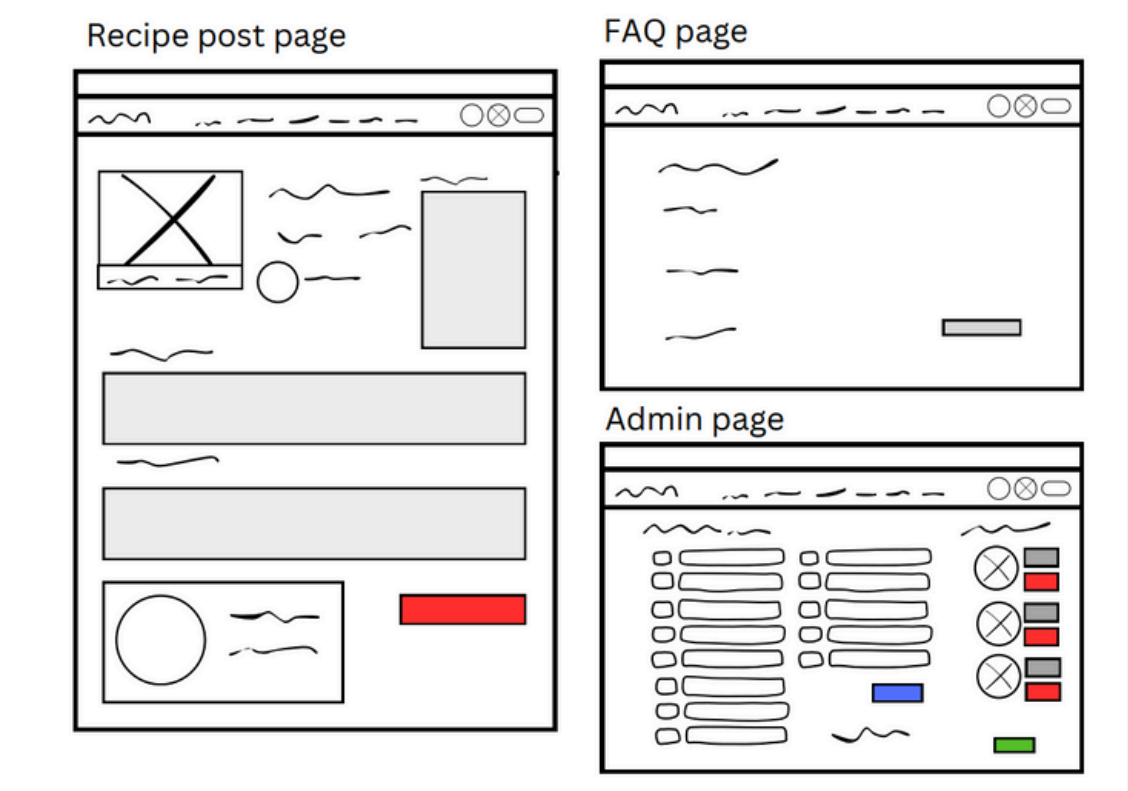


Category browsing page



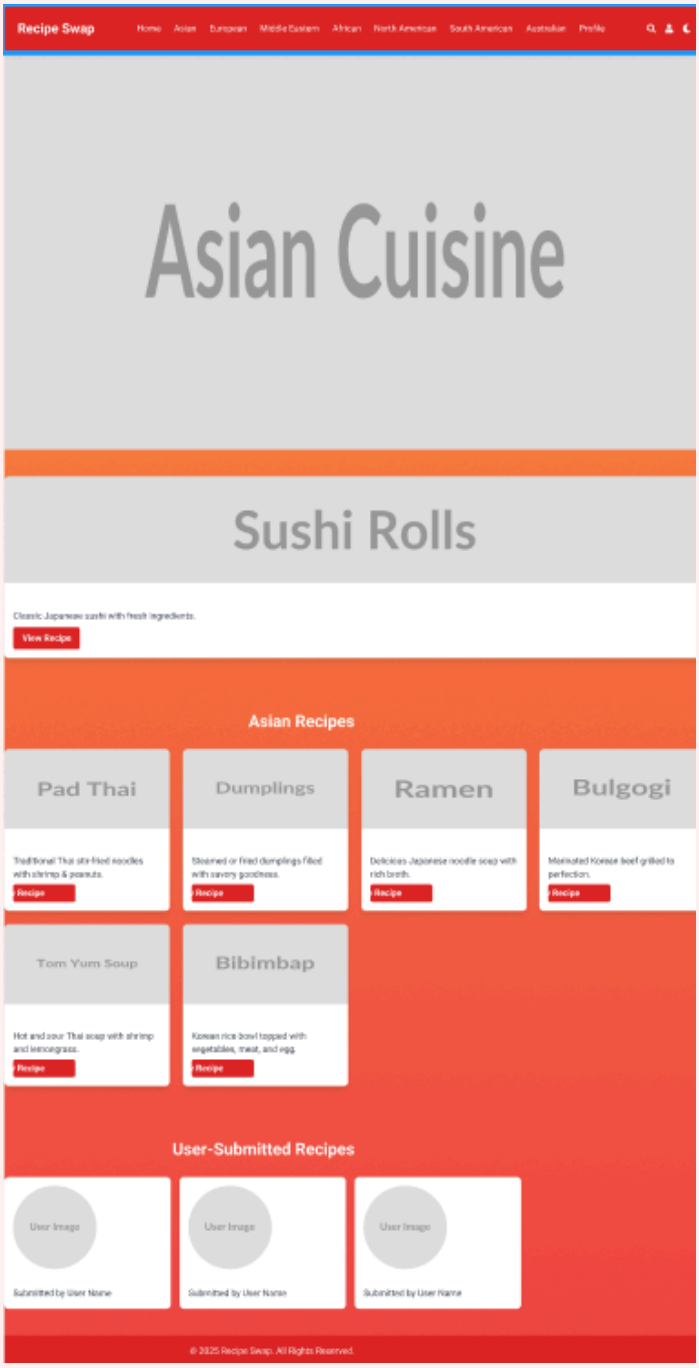
Wireframe

Low Fidelity:

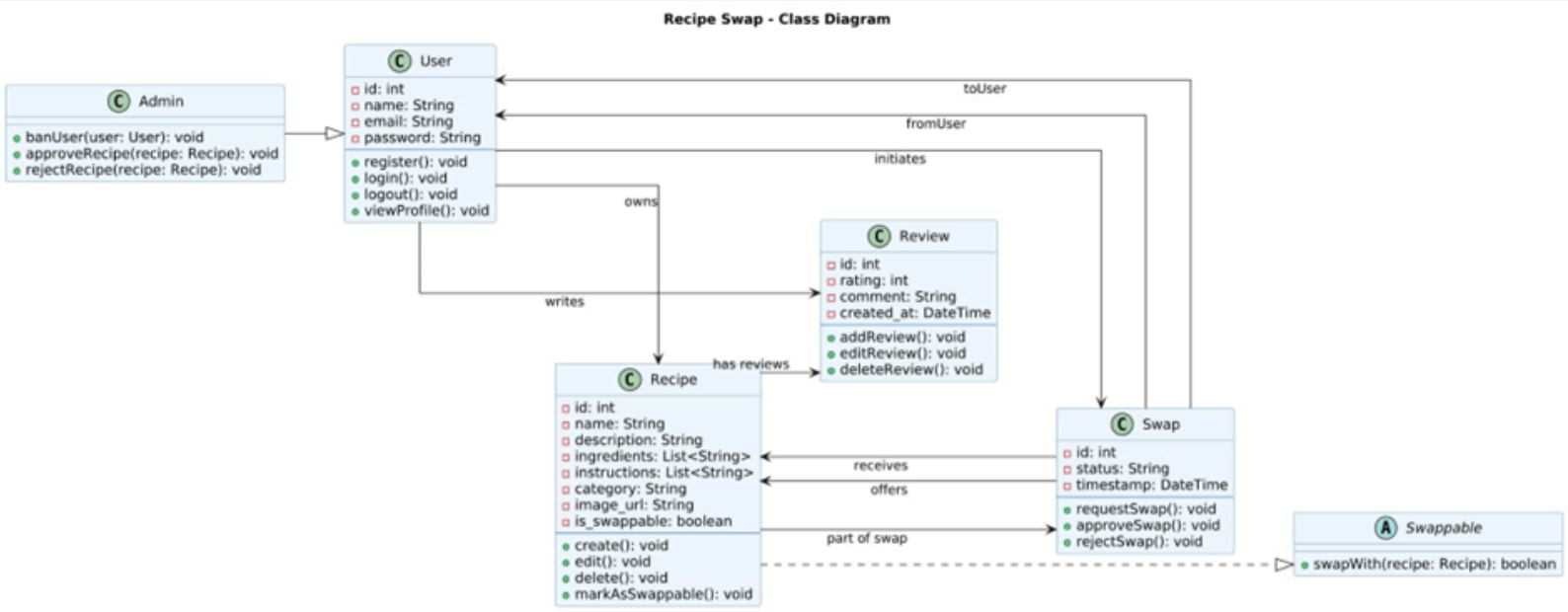


Wireframe

High Fidelity:



Class Diagram

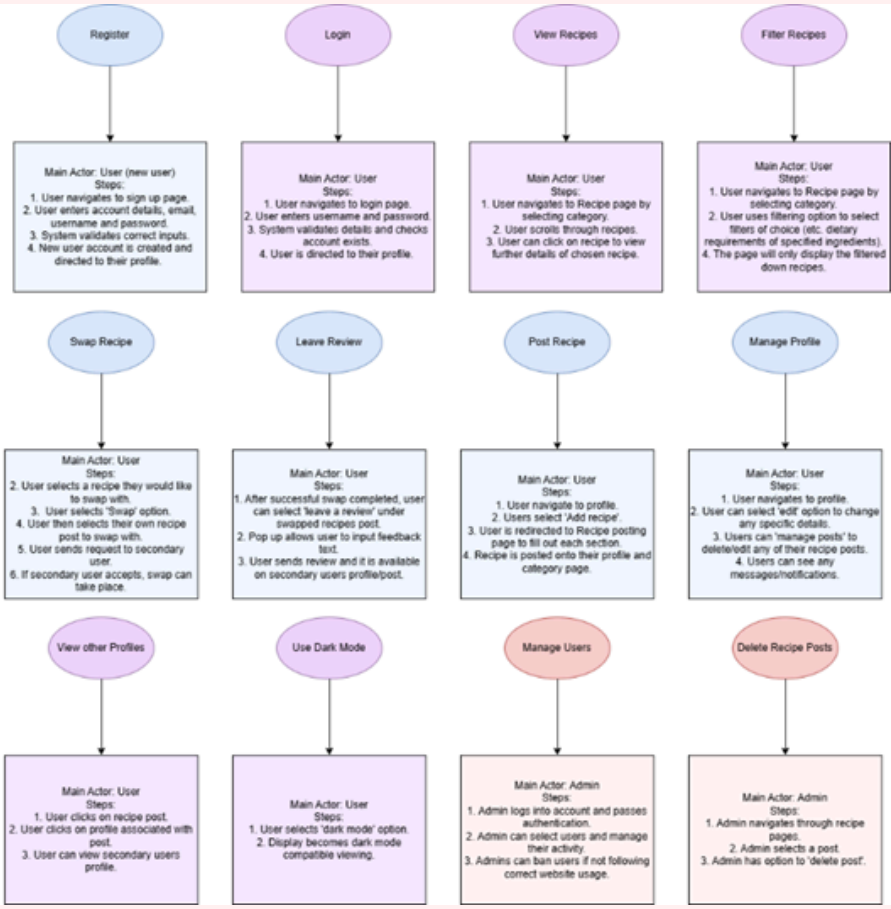


The class diagram uses various relationships, **including association, aggregation, and inheritance.**

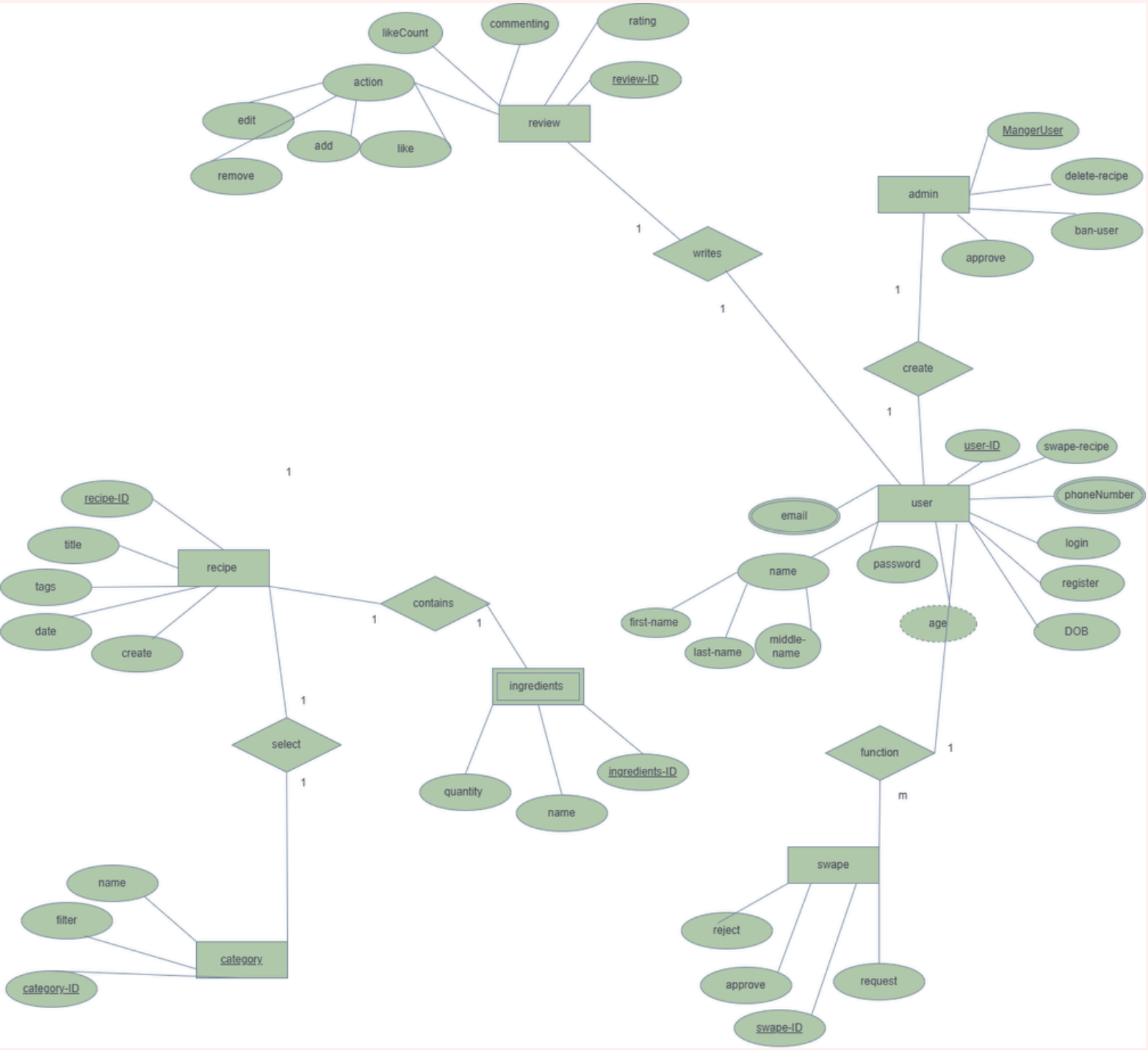
- **Inheritance**: Admin inherits from User, meaning an admin has additional privileges like managing users and deleting recipes.
- **Aggregation**: Recipe is associated with multiple Ingredient objects, meaning a recipe contains ingredients, but ingredients can exist independently. Similarly, Category groups multiple recipes.
- **Composition**: User writes Reviews and initiates Swaps, implying strong ownership where reviews belong to users and swaps involve specific users and recipes.
- **Associations**:
  - User owns multiple Recipes.
  - User receives Notifications.
  - Swap involves two Users and two Recipes.
  - Recipe includes Ingredients.

These relationships define how components interact within the system.

Use Case Diagram



ERD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delete-recipe
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ERD (2)

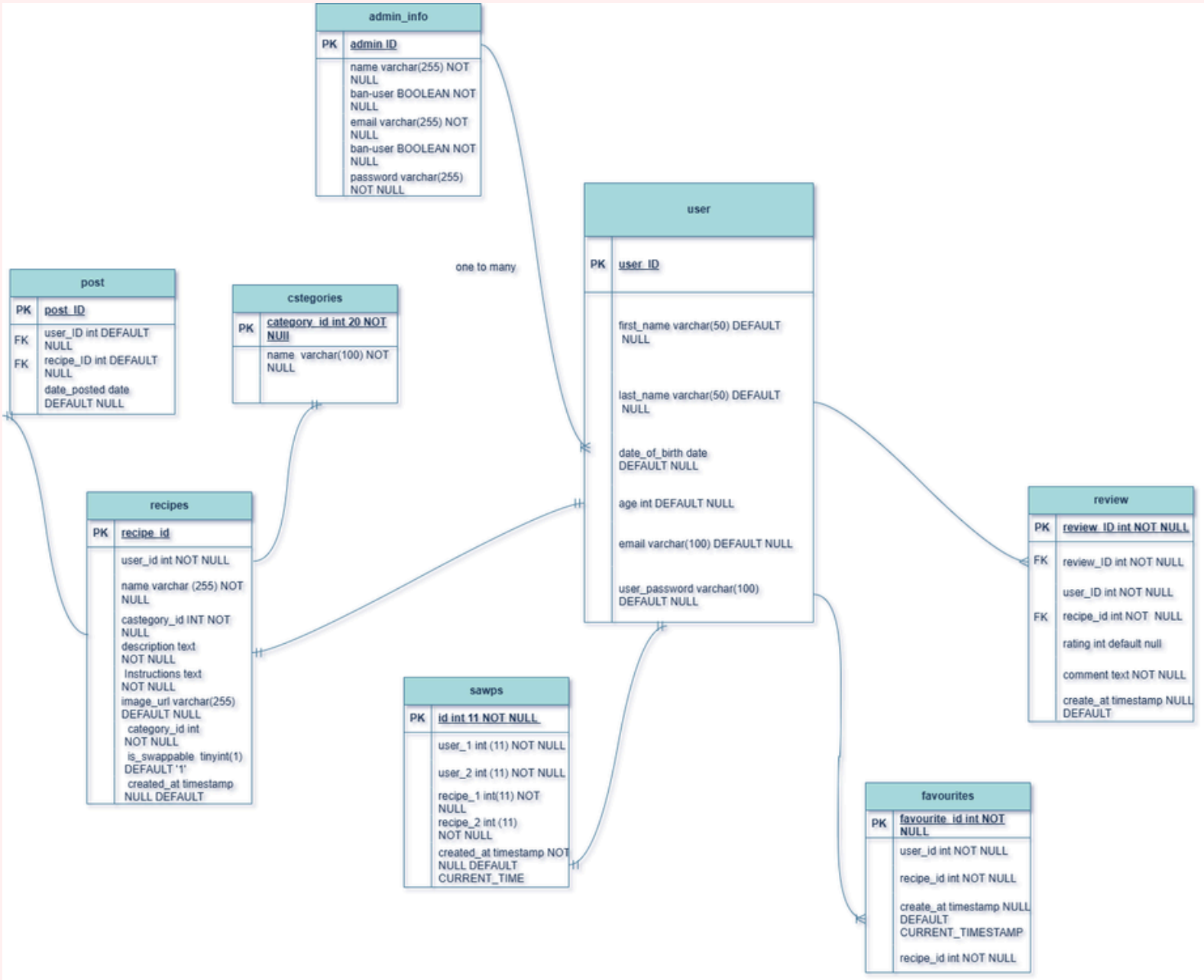
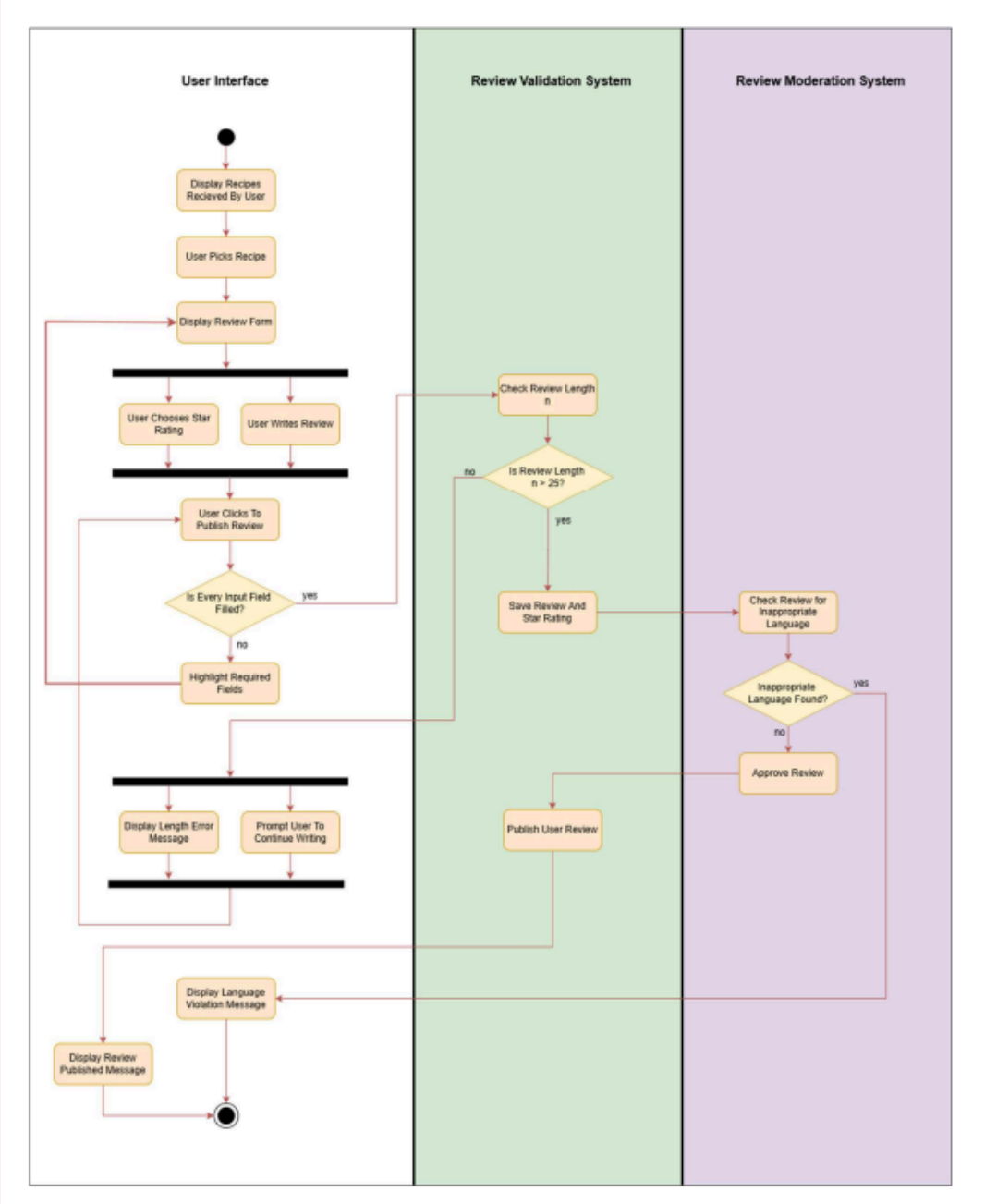


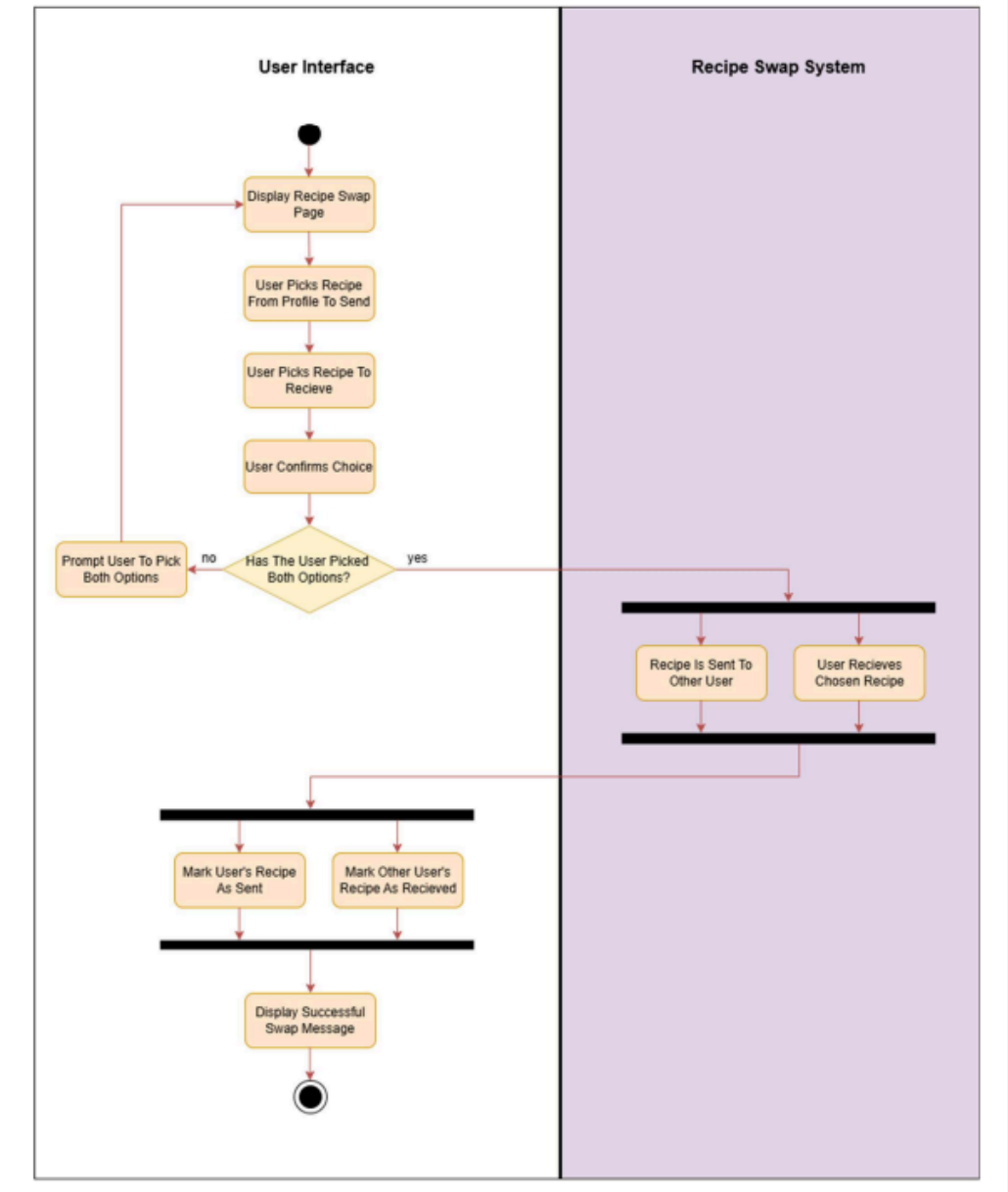
Diagram (ERD) is a visual representation of the data structure in a system, often used in database design . It shows how different entities (e.g., tables, objects, or concepts) are related to each other within a system, helping to clarify how data interacts.RDs help in creating databases by identifying entities, their attributes, and the relationships between entities. This structure is vital for organizing and managing data efficiently.

Activity Diagram



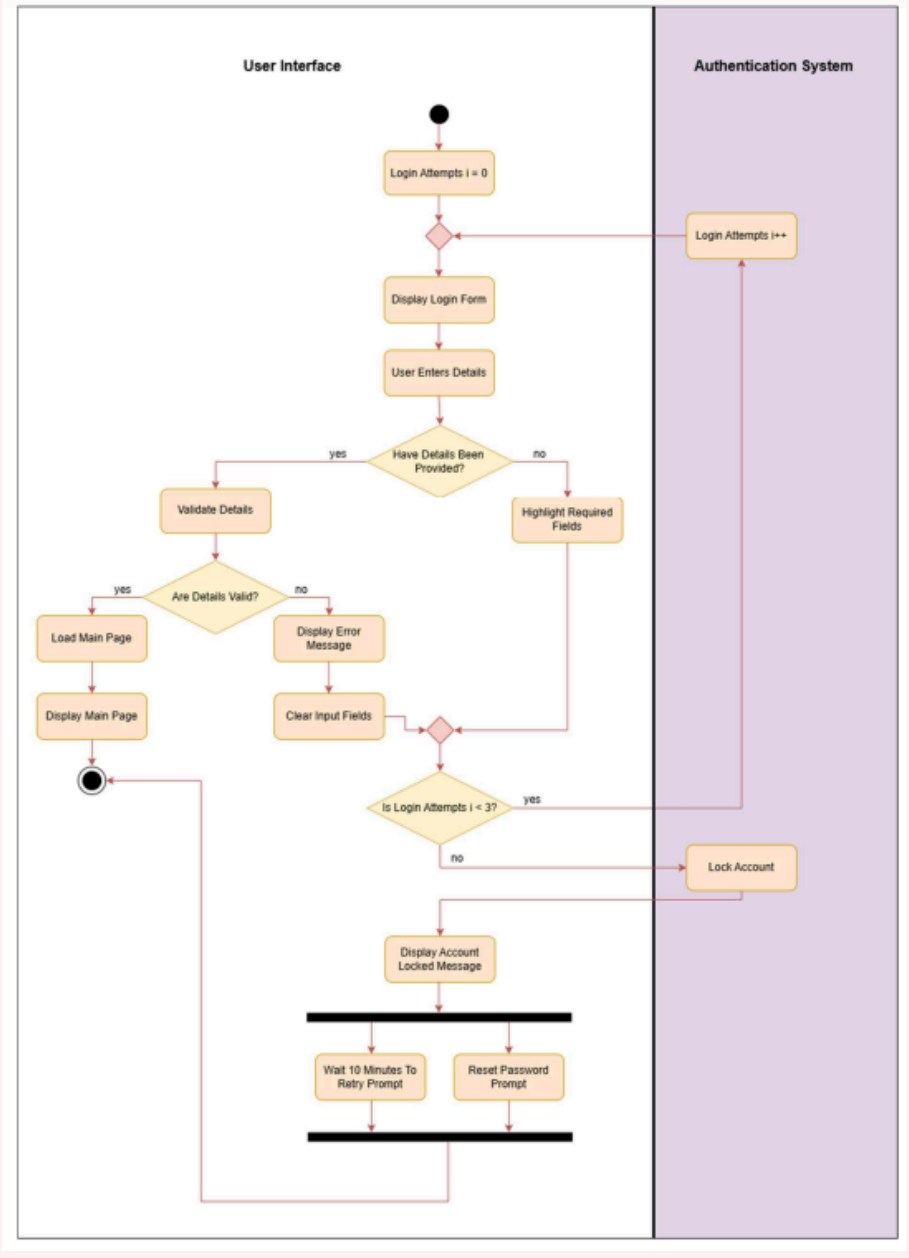
The diagram shows the reviewing system. When a user has received and tried a recipe, they are able to post a review. They are given a review form where they can add a star rating and written review. There are checks for the length of the written review and the content when they try to publish it. This is for moderation checks, to make sure the website remains constructive and positive. If the user doesn't meet the length or content requirements, they are notified and can continue to write the review or start again. If all the content is fine, the review is published.

Activity Diagram (2)



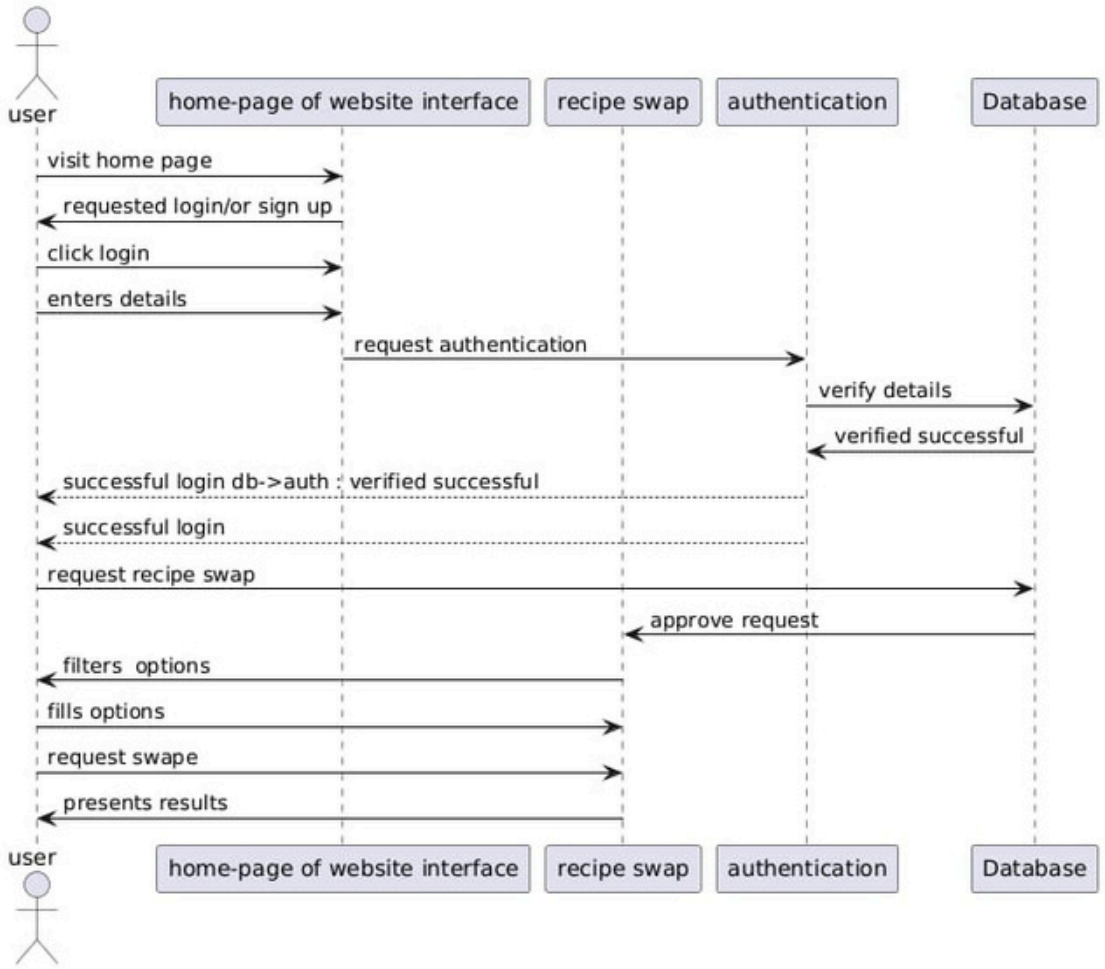
For the recipe swap system, the user is only able to swap a recipe if they already have one on their profile. If they do, they choose the recipe they want to swap then the one they want to receive. When the user confirms, there is a check to make sure they've picked both options and if they haven't, they are prompted to do so. When both recipes have been chosen, the user receives the recipe and theirs is sent at the same time. The user then sees confirmation that the recipes have been swapped successfully.

Activity Diagram (3)



This diagram shows the ideal flow for the login system for when the user has an existing account. On the interface side, the user is shown the login form and starts with 0 login attempts. They then input their login details and if they match what is in the database, they are logged in. If the details are wrong, the user is notified and are then prompted to try again. If the details are inputted incorrectly 3 times, the account is locked, and they are given the option to wait and try again or reset their password.

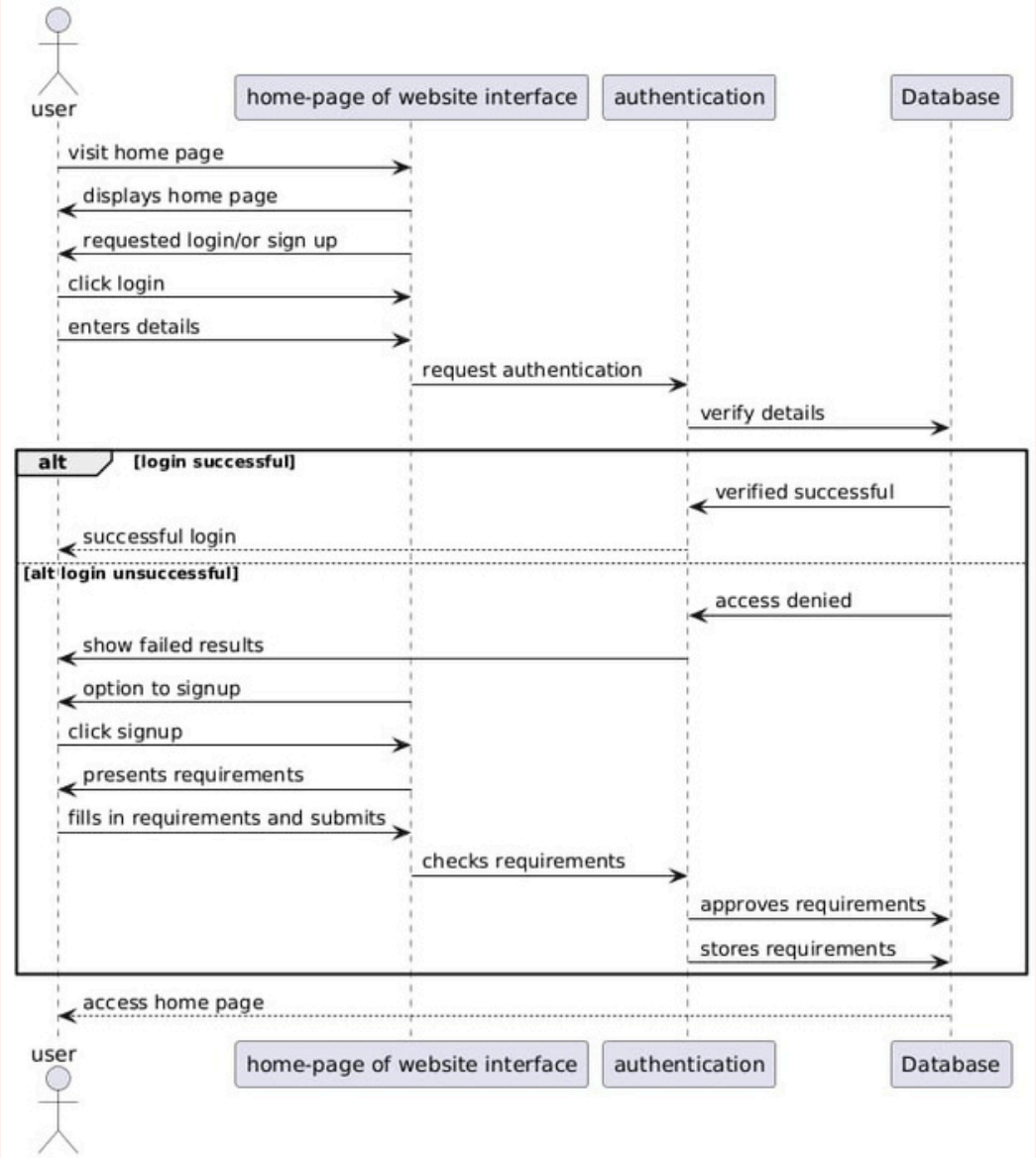
Sequence Diagram



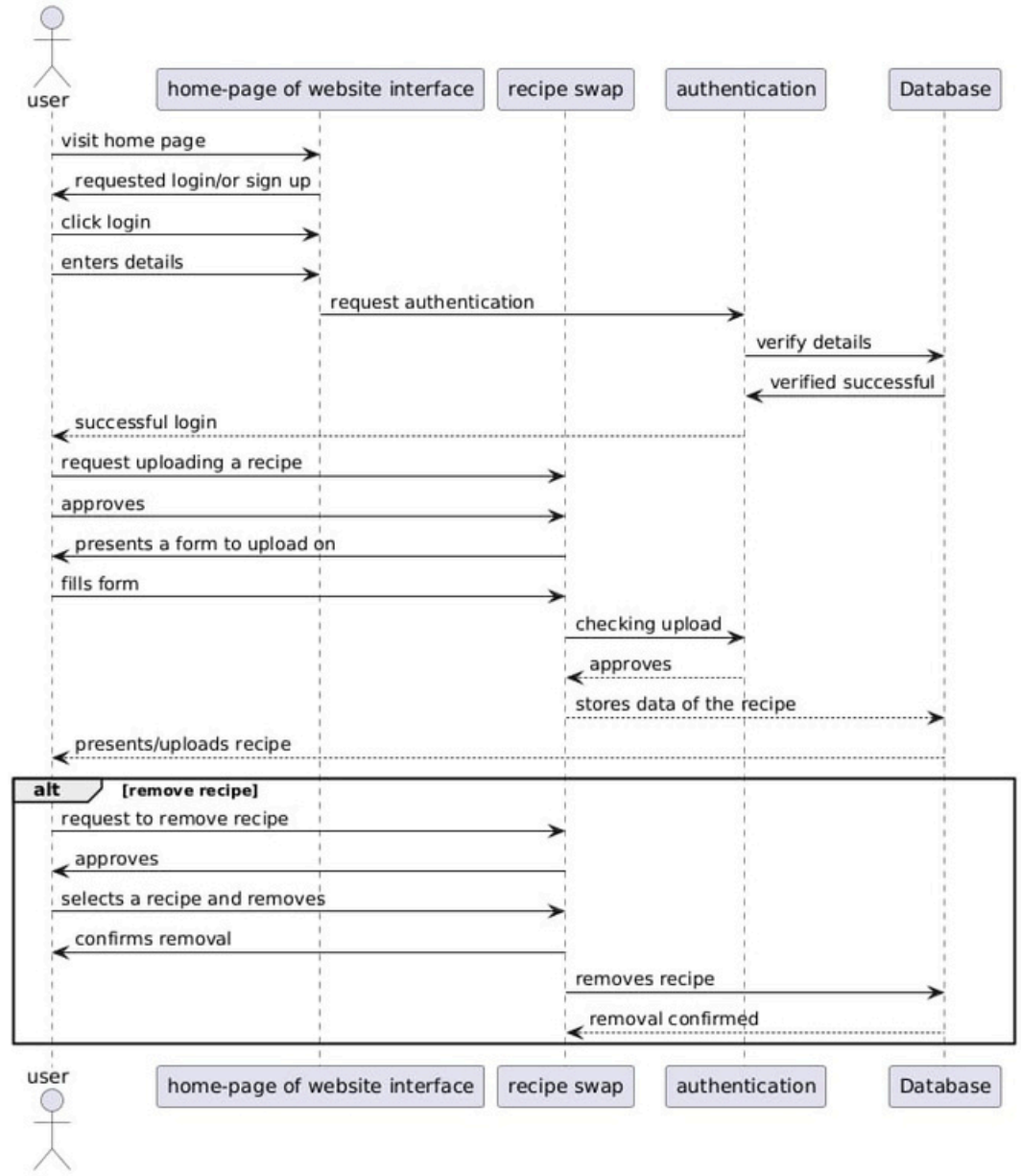
These sequence diagrams represent interactions in a recipe management system, focusing on user authentication, recipe management recipe recipe review, and recipe swapping. Users can log in, sign up, upload, remove, review, and swap recipes. The system authenticates users, verifies credentials, and manages recipes through approvals and database storage.

Admins oversee recipe removal, while the system provides filtering and approval mechanisms for recipe swaps. The diagrams highlight how different actors (users, authentication, database, and the website interface) collaborate in these processes.

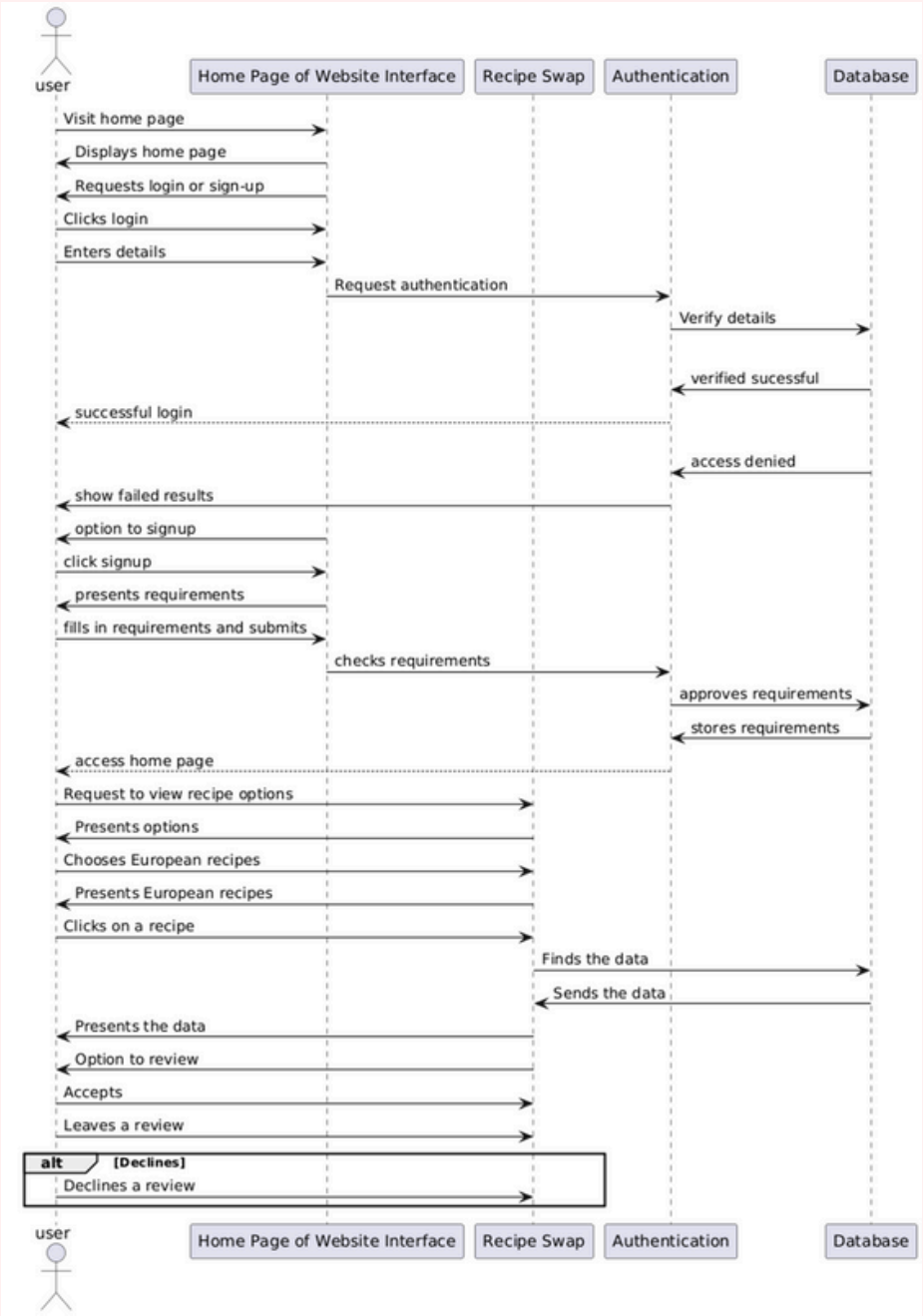
Sequence Diagram (2)



Sequence Diagram (3)



Sequence Diagram (4)



User Stories

User Stories

1. As a **[user]** I want to **[post my recipes]** to a wider range of people.
2. As a **[user]** I want to **[browse recipes]** with a filtered approach.
3. As a **[user]** I want to **[view my profile]** where I can **[edit my details and posts].**
4. As a **[user]** I want to **[select a recipe]** so that I can **[swap my own with it].**
5. As a **[user]** I want to **[leave reviews]** after trying out a recipe swap.
6. As a **[user]** I want to **[use a dark-mode option]** to **[decrease my eye strain].**
7. As a **[user]** I want to [easily navigate the instructions of a recipe] with titled sections.
8. As **a [user]** I want to **[view others profiles]** so that I can [network with them and follow more of their recipes].
9. As an **[admin]** I want to **[manage users]** so that I can **[check their activity and ban any unauthorised users].**
10. As an **[admin]** I want to **[delete recipe posts]** if they do not meet the guidelines.
11. As a **[user]** I want to **[view others profiles]** so that I can **[network with them and follow more of their recipes]**.
12. As an **[admin]** I want to **[view user made content like reviews and recipes]** so I can **[moderate the content].**
13. As an **[admin]** I need **[special privileges that let me suspend accounts and delete user made content that violate guidelines]** to **[maintain a positive environment]**

Meeting Minutes

Meetings

Project Name	Recipe Swap
Date and Time	27/01/25 16:00
Meeting Goal	• agree on code of conduct • choose group name • choose project
Facilitator	N/A
Note Taker	Aneeta
Attendees	Aneeta, Maahia, Shaiza, Sumana
Roundtable Updates	N/A
Discussion Points	• group name - we decided on NomNom • project selection - we chose recipe swap. reading through the list, we already had lots of ideas for the design and content • meeting days - we'll meet at least once a week to show each other what we've done and give feedback
Actions	• Project description refined – Aneeta • Code of Conduct – Sumana • Personas – Maahia • Ethical Issues – Shaiza • Meeting minutes – Aneeta • Create wireframe – all

Meetings

Project Name	Recipe Swap
Date and Time	03/02/25 14:54
Meeting Goal	• discuss any updates
Facilitator	Aneeta
Note Taker	Aneeta
Attendees	Aneeta, Maahia, Shaiza, Sumana
Roundtable Updates	• Maahia – completed 2 personas • Sumana – completed code of conduct • Aneeta – completed project description • Shaiza – completed and uploaded ethical issues to GitHub
Discussion Points	• What we got done – we all managed to complete our designated tasks but some of us need to upload it to github. We set up the new repository and invited everyone as collaborators. Also discussed what should be on the Kanban board
Actions	• Upload any outstanding tasks to github – all • Complete Kanban board – all • Add all items into one pdf file – Aneeta • Set up docker environment – all • Upload document to Moodle - Shaiza

Meetings

Project Name	Recipe Swap
Date and Time	10/02/2025 2-5 PM
Meeting Goal	• Brainstorm coding ideas and methods for the project · • Review sprint 2 task and splitting them • Deciding on a colour scheme
Facilitator	Shaiza
Note Taker	Shaiza
Attendees	Aneeta, Maahia, Shaiza, Sumana
Roundtable Updates	• Aneeta – looking for API to add to the product • Maahia – discuss sprint 1 and suggest ideas for sprint 2 • Shaiza – completing note sheet • Sumana – setting up docker environment All – editing/improving sprint 1
Discussion Points	• · Review the code of conduct and add the missing information • How the swape idea and how it will function • Colour scheme for the project • Layout for home pages and other pages • Add GDPR and data privacy · Copyright scan/filter per recipe
Actions	• Aneeta – colour scheme and finding useful coding skills for the project • Maahia – edit user stories based on feedback • Shaiza – editing ethical issues based on feedback • Sumana – edit code of conduct based on feedback • All – being clear on what is needed to be done for this project

Meetings

Project Name	Recipe Swap
Date and Time	17/02/2025 2-5 pm
Meeting Goal	• Brainstorm coding ideas and methods for the project · • Review sprint 2 task and splitting them • Deciding on a colour scheme
Facilitator	Shaiza
Note Taker	Shaiza
Attendees	Aneeta, Maahia, Shaiza, Sumana
Roundtable Updates	• Select tasks for sprint 2 • Finish lab work • Discuss the points for the website so everything in clear and easy to understand • Aneeta – structure diagrams • Maahia – use case diagrams • Shaiza –sequence diagrams • Sumana – wireframes •
Discussion Points	• colour schemes , designs • function • splitting tasks for sprint 2 • labs activities
Actions	• Aneeta – activity diagrams, structure diagram • Maahia – user stories , use case diagram • Shaiza – sequence diagrams, ERD diagram • Sumana – edit document, wireframes, class diagram • All – designs, colour schemes, Kanban board

Meetings

Project Name	Recipe Swap
Date and Time	24/02/2025 2-5 pm
Meeting Goal	• taking feeback for sprint 2 to use for sprint 3 • discussing themes for sprint 3 and how we will do it • reviewing pdf to see if we need to change anything
Facilitator	Shaiza
Note Taker	Shaiza
Attendees	Aneeta, Maahia, Shaiza, Sumana
Roundtable Updates	• Select tasks for sprint 3 • do labs • Discuss the points for the website so everything in clear and easy to understand • •
Discussion Points	• colour schemes , designs • function • splitting tasks for sprint 2 • labs activities
Actions	• Aneeta – reviewing activity diagrams, structure diagram for sprint 3 • Maahia – reviewing user stories , use case diagram for sprint 3 • Shaiza – reviewing sequence diagrams, ERD diagram for sprint 3 • Sumana –reviewing wireframes, class diagram for sprint 3 • All – labs

Meetings

Project Name	Recipe Swap
Date and Time	03/03/2025 2-5 pm
Meeting Goal	• layout for each section of the website • sprint 3 discussion • brainstorming methods to connect or sections • doing the lab task
Facilitator	Shaiza
Note Taker	Shaiza
Attendees	Aneeta, Maahia, Shaiza, Sumana
Roundtable Updates	• labs completed • Aneeta – user profile • Maahia – login page • Shaiza – admin page • Sumana – home page • all - layout plan •
Discussion Points	• colour schemes , designs • who will do what • plan for pages • updating any diagram for pages •
Actions	• Aneeta – user profile • Maahia – login page • Shaiza – admin page • Sumana – home pag • All – designs, colour schemes, sprint 3 disccution

Meetings

Project Name	Recipe Swap
Date and Time	10/03/2025 2-5 pm
Meeting Goal	• checking everyone is doing okay with there sections • doing the lab • reviewing sprint 3 tasks
Facilitator	Shaiza
Note Taker	Shaiza
Attendees	Aneeta, Maahia, Shaiza, Sumana
Roundtable Updates	• labs completed • Aneeta – user profile • Maahia – login page • Shaiza – admin page • Sumana – home page • all - having the layout and colour theme implimated for each person
Discussion Points	• sprint 3 tasks • websites • each section
Actions	• Aneeta – user profile • Maahia – login page • Shaiza – admin page • Sumana – home pag • All – sprint 3 disccution

Meetings

Project Name	Recipe Swap
Date and Time	17/03/2025 2-5 pm
Meeting Goal	• have an idea of how to links all the webpage • make sure all the pages works • lab
Facilitator	Shaiza
Note Taker	Shaiza
Attendees	Aneeta, Maahia, Shaiza, Sumana
Roundtable Updates	• labs completed • Aneeta – user profile • Maahia – login page • Shaiza – admin page • Sumana – home page • all - connect everything •
Discussion Points	• connect everything • make sure everthing is running • everyone is on the right path
Actions	• Aneeta – user profile • Maahia – login page • Shaiza – admin page • Sumana – home pag • All – learn to connect the sections together

CONTRIBUTION

Sumana: As part of my role in the project, I was responsible for the recipe post page, posting mechanism, reviews, and filtration. I contributed to the design of the Recipe and Review classes in the class diagram, covering key features like ingredients, instructions, categories, and the ability to mark recipes as swappable. In addition to the object-oriented structure, I also worked on the corresponding SQL tables to support these features in the database, including table relationships between users, recipes, reviews, and swaps. I helped define the structure and organisation of the database to store recipe data, user-generated reviews, and swapability status. My work ensured users can post and interact with recipes, while the database efficiently supports filtering and review functionalities.

Maahia: For this project, I was in charge of the login page, account creation page, homepage and swapping mechanism. For the login and account creation, I utilized automated encryption through bcrypt, as we were taught in the seminar, to provide secure access to users. The data of the users are taken from the users SQL table and it is processed to make sure that banned users are unable to access, admins are redirected to their own page and normal users can have their personalised sessions. Similarly, the homepage lists the recipes by taking the data from the SQL recipes table and displaying them via the pug engine onto the webpage. The swapping mechanism takes the data of the selected recipes and places it in the ‘swaps’ table to keep a record of this and show the mechanism works. This will be further implemented in the next sprint. My contribution allows the start of our user experience and gains insight into our fundamental swapping mechanism.

CONTRIBUTION

Aneeta:I was in charge of the profiles and users section. I also helped to fix many of the errors in the database when merging everyone's work together and inputting data, to ensure that it was all properly connected and consistent as we all needed to be working from the same file. I also made sure that related tables were all linked together with the correct ID's and foreign keys, so that when it came time to fetching the data in javascript, the results matched what was in the database.
For the profiles, I made sure that the necessary information was fetched from the database, and created a clean and readable layout using pug and css. It's coded so that when you enter the user id into the url ('localhost:3000/profile/1' for example), it keeps the same layout and only changes the content. The users can be displayed in a stylised table, and lists all the users from the database with their first and last names, email, age and date of birth

Shaiza:In this group project, I was responsible for various administrative tasks, including banning users, approving user registrations, and ensuring that all user activities are accessible to the admin team. I created four main SQL tables to track activities on the website: users, approved users, banned users, and deleted user. I made sure that all the tables and the rest of the SQL were properly linked to one another, allowing us to display user information and access all user activities through SQL when clicking on a user's name on the admin page by redirecting the page to 'loacallhost:3000/admin/user:id '.
Additionally, I developed a function to remove recipes and reviews from users if they do not comply with the code of conduct and ban users as well .

LINKS

GitHub
https://github.com/maahiarahman/Software-Engineering-Project

Kanban Board
https://github.com/users/maahiarahman/projects/1

maahiarahman/Software-Engineering-Project

Backlog · nom nom MASS

screenshots: