

Milestone 1 - Meal Master

Information Management & Systems Engineering

WS 2023

Nadezhda Tsvetkova - 11942924

Lucas Enzi - 12029628

1. Description

MealMaster¹ is a user-friendly meal planning tool that helps you create meal plans for any number of days. With MealMaster, you can store your favorite recipes, each with a name, cooking instructions, a rating, and links to the original recipe and images of the dish.

Recipes are categorized using a color-coded tagging system for quick and intuitive searching based on user preferences or dish types. MealMaster's ingredient feature allows for the cataloging of food items, complete with alternative options, offering flexibility in meal preparation.

MealMaster also lets you manage ingredients. Each recipe can include various ingredients, which can be used in multiple recipes. Ingredients can be linked to alternatives, giving you flexibility in your cooking.

Ratings help you to keep track of your favorite dishes with the breeze of a click. Each rating contains a score (1 to 5 Stars), a review and a name of the author. A recipe can contain multiple ratings.

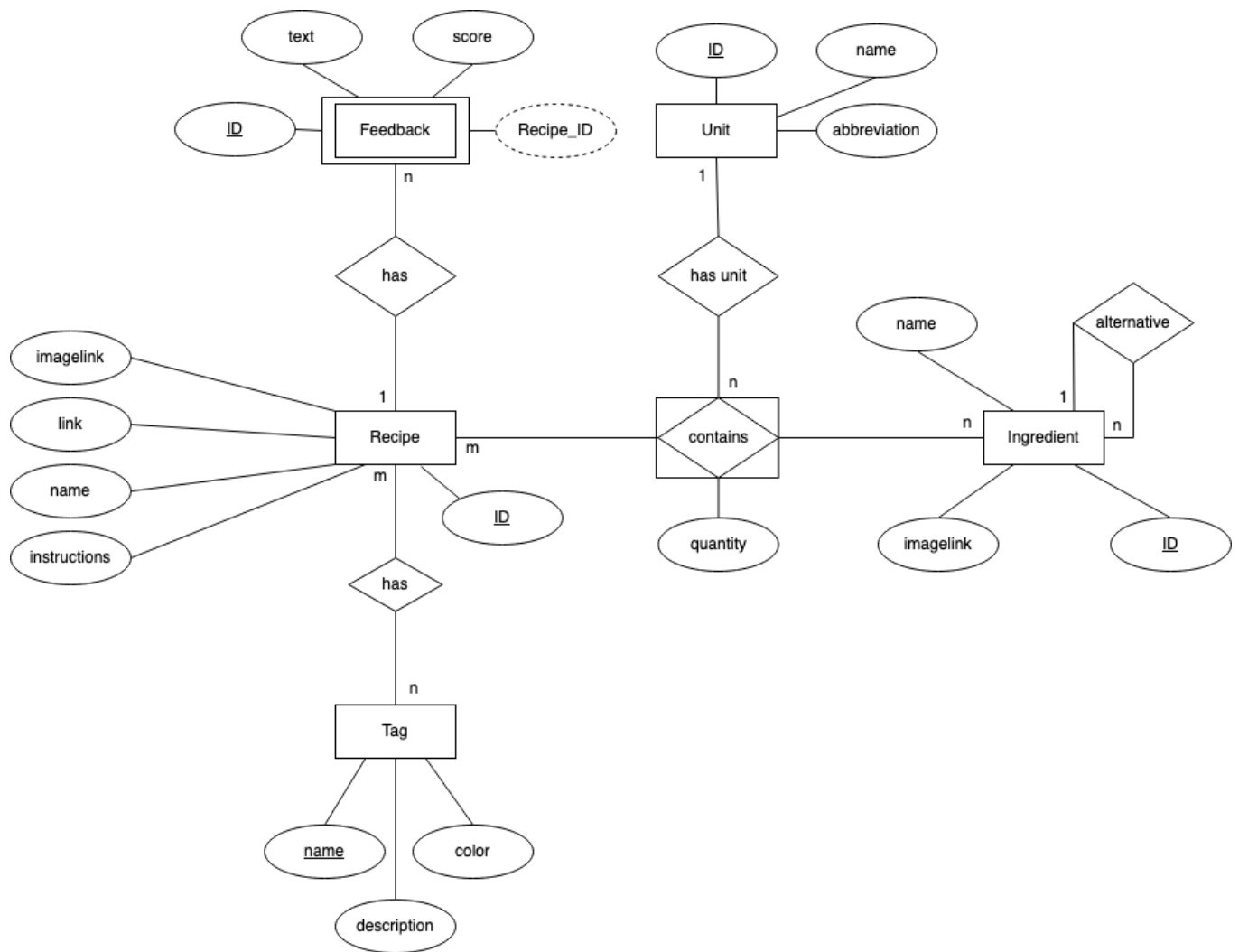
MealMaster also includes a feature for generating random meal plans, helping users to decide what to cook over a set number of days. It simplifies meal preparation by standardizing ingredient units, ensuring consistency across recipes.

In order to simplify the adding of ingredients to a recipe, the used units are also provided for each component.

MealMaster is crafted to be a reliable tool for individuals seeking an organized approach to meal planning and culinary exploration.

¹ based on the DBS project by Lucas Enzi

2. Model



3. Use Cases

Filter recipes by tag

Lucas Enzi

The user wants to filter all recipes by specific tags.

Preconditions

The user is using the website and currently on the explore page.

Expected execution

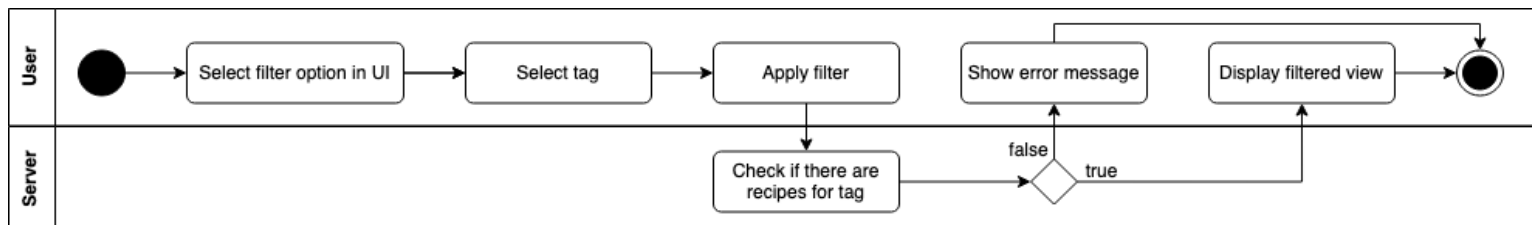
The user is selecting the filter option in the UI and enters his desired tag.

Postcondition (Success)

The page gets updated and only recipes with the selected tag are shown.

Postcondition (Error)

An error message gets shown that no recipes are present with the desired tag.



Search by name (main use case)

Nadezhda Tsvetkova

Objective: To facilitate the search for recipes by their name.

Description: Users enter a search term, and the system retrieves recipes with matching names.

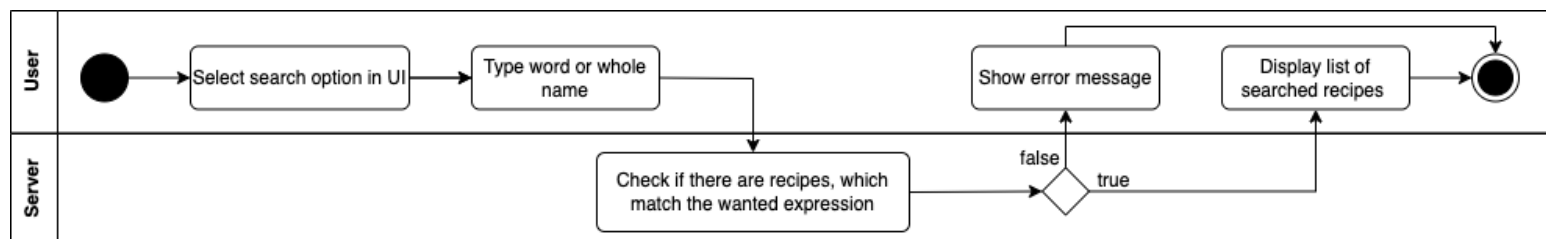
Precondition: There must be recipes stored in the database.

Expected Execution:

- User enters a search term in the search field.
- System performs a search for recipes with names that contain the term.
- System presents the search results to the user.

Postcondition (Success) User views a list of recipes that match the search term.

Postcondition (Error): If no matches are found, inform the user.



Add a recipe (main use case)

Lucas Enzi

The user adds a new recipe to the site.

Preconditions

The user is anywhere on the site.

Expected execution

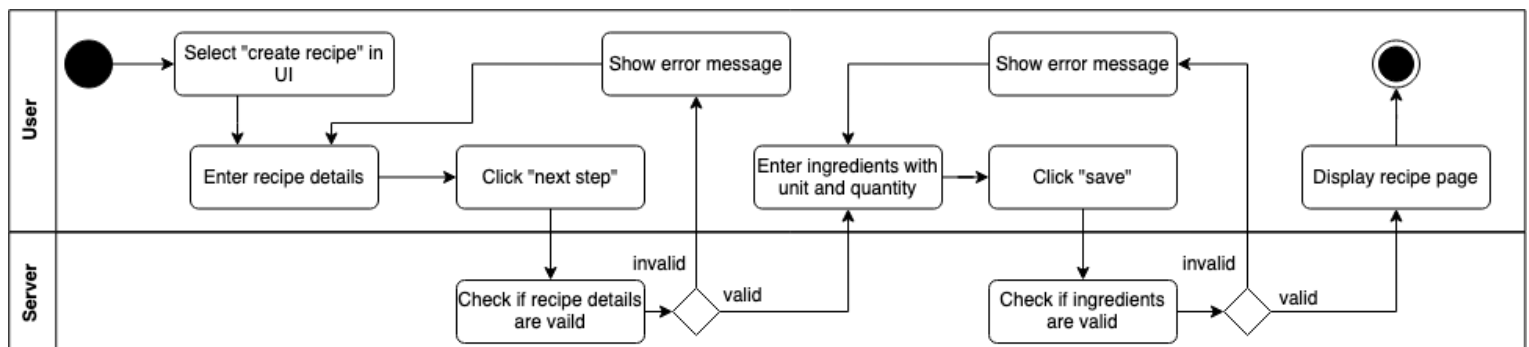
The user enters a recipe name, description and all required information. After that he continues to enter all ingredients with the required amounts. After that he clicks on "save recipe"

Postcondition (Success)

The user gets forwarded to the successfully created recipe site.

Postcondition (Error)

An error message gets shown that there is a problem with the creation of the recipe.



Add Feedback to a Recipe

Nadezhda Tsvetkova

Objective: To allow individuals to provide personal feedback on recipes, contributing to community insights.

Description: Individuals provide written feedback and a score for a recipe they have tried or are interested in.

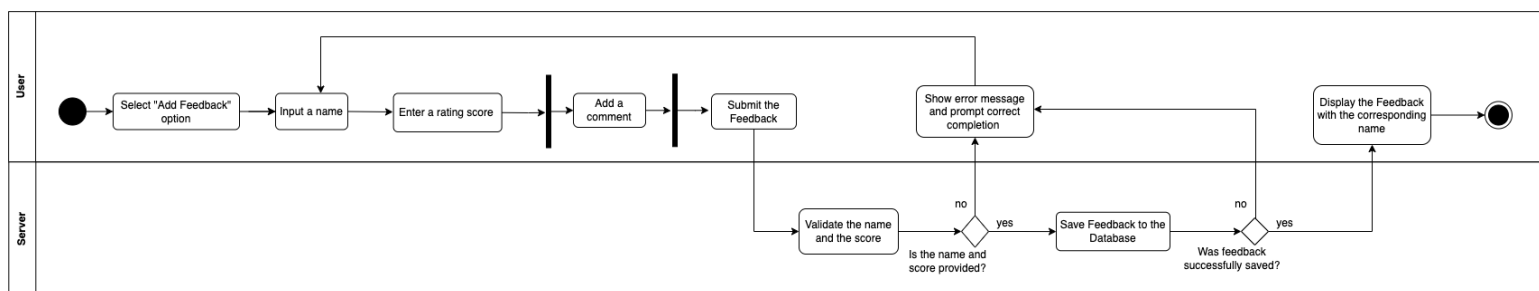
Precondition: Individual must provide a name to associate with the feedback.

Expected Execution:

- Individual enters their name.
- Individual completes the feedback form with their comments and a rating score.
- Individual submits the feedback.
- System saves the feedback along with the individual's name and associates it with the recipe's ID.

Postcondition (Success): Feedback, including the provided name, text, and score, is displayed on the recipe's page for all viewers.

Postcondition (Error): If the feedback submission fails, the individual is prompted to resubmit.



4. Reporting

Most Common Tag from All Recipes

A report identifying the most common tag used in all "Meal Master" recipes, giving insight into the most popular food trends.

Used entities: Recipe, Tag, Feedback

Filtered by: Minimum number of recipe associations

Sorted on: Number of tag occurrences

Columns: "Tag Name", "Occurrence Count"

Most Used Ingredient from Top-Rated Recipes

A report to identify the ingredient that appears most frequently in recipes with the highest user feedback scores. It aims to uncover the ingredients that are common in highly-rated recipes, potentially guiding future recipe development and ingredient stock decisions.

Used entities: Recipe, Ingredient, Feedback

Filtered by: Recipes with feedback scores above a certain threshold

Sorted by: Ingredient frequency in top-rated recipes

Columns: "Ingredient Name", "Frequency in Top Recipes"