

Project: Recipe Planner

Project Idea

Recipe Planner is a class project web application that helps users save their recipes, organize them into weekly meal plans, and manage the connection between ingredients and meals. It is designed as a demonstration project with a clear database structure and simple user interface.

Main Components

Authentication (Account)

Users can register and login. Each account contains an ID, email, password, and display name. Accounts are linked to Recipes thanks to the Connects connect table.

Recipes

Each recipe contains an ID, title, description, preparation time, cooking time, servings, difficulty, steps, and an illustration. Recipes are linked to Ingredients thanks to the Needs connect table.

Ingredients

Each ingredient contains an ID, name, calories, and properties. They also have all their nutritive specs such as Fat, Carbs, Fibers, Protein, Salt and Sugar. Ingredients are being sold by shops with a connector table called Sells.

Shops

Each shop contains an ID, a name, a type of shop, an address, its opening time, an about text information, a website link and a phone number.

Connector tables

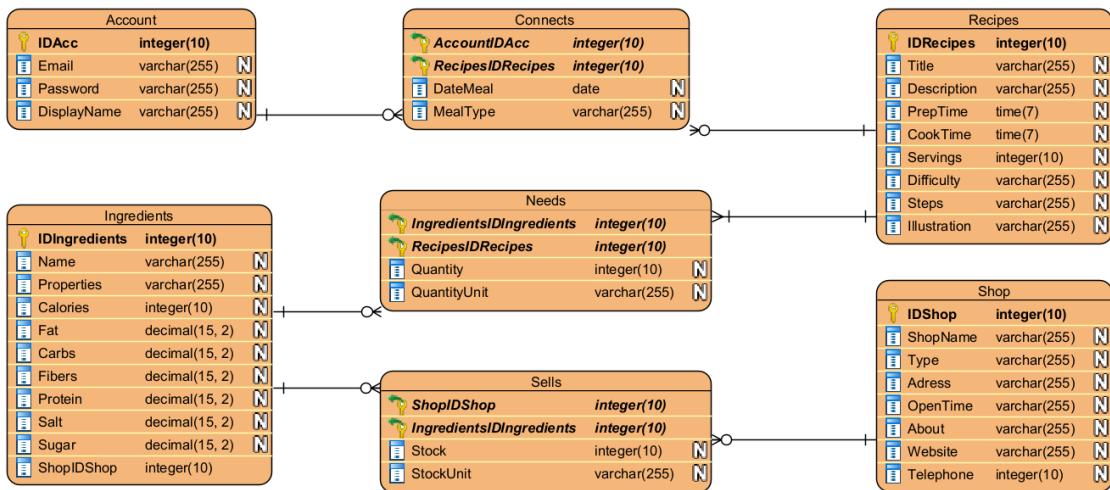
Several connector entities are used to manage relations:

- Connects: links Account to Recipes with the date for the meal and its type (breakfast, lunch...)
- Needs: links Recipes to Ingredients with the quantity and its unit.
- Sells: links Shops to Ingredients with the quantity stocked and its unit.

Database overview

- Account: authentication and profile information
- Recipes: details of each recipe
- Ingredients: food elements with calories and properties
- Shop: shop informations

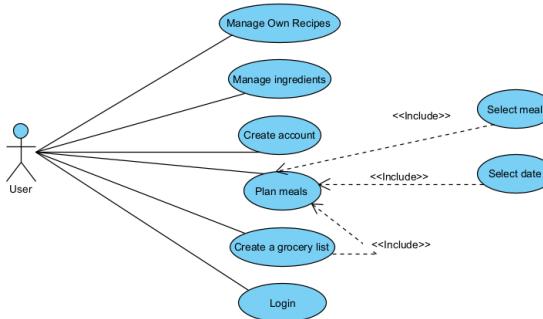
- Connects: relation between Account and Recipes
- Needs: relation between Recipes and Ingredients
- Sells: relation between Shops and Ingredients



ER Diagram:



Use Case Diagram:



Name	UseCaseMealPlanner
Description	The system allows users to manage recipes and ingredients, plan meals for specific dates, and generate grocery lists based on their planned meals. Users can create and log into accounts to store their data.

Our GitHub link project:

https://github.com/YohannP0611/Meal_Planner

To check the progress, you can access the UML_Gantt.xlsx file in \docs.

Future possible improvements

In a second phase, we would like to expand the project to include more features such as a flexible shopping list, dietary filters (vegan, gluten-free, etc.), user ratings, and comments on recipes. This would optimize the site and make it more practical, but for now we will keep the base model shown above.