

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

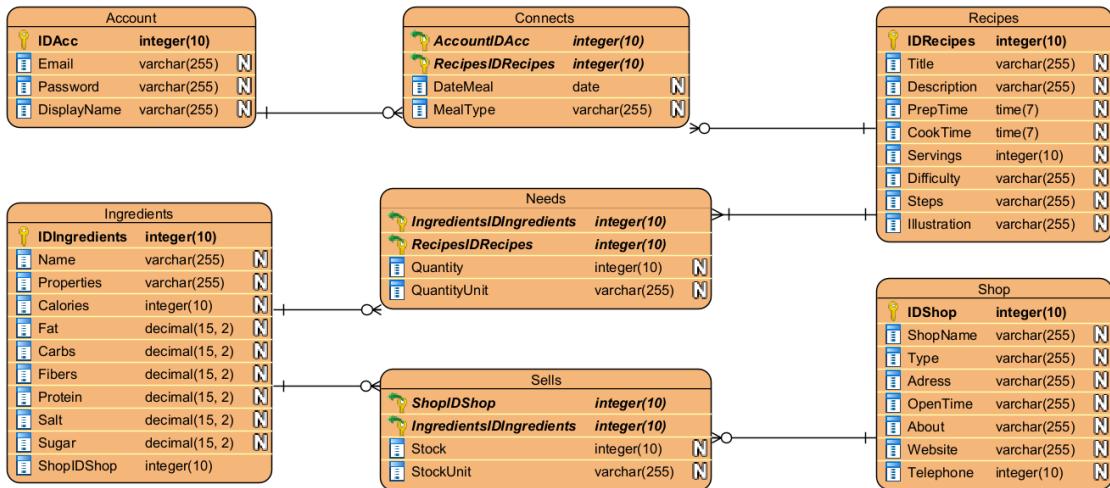
Several connector entities are used to manage relations:

- 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

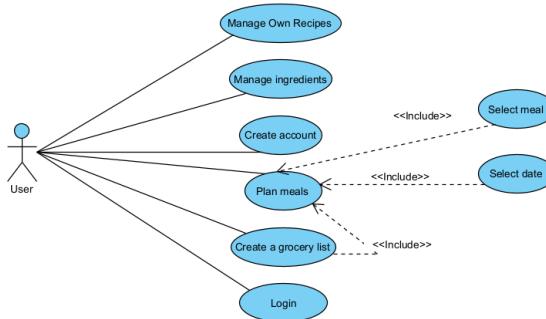
- Connects: relation between Account and Recipes
- Needs: relation between Recipes and Ingredients
- Sells: relation between Shops and Ingredients



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

Gantt Diagram:

Task	Status	Owner	Proof / File	Folder	Definition of Done (DoD)	Deadline
Project initialization & idea	Initial version	Yohann	Initial commit; project idea notes	root / docs	Repo created; basic idea written	26 Sep
Database structure & UML base	In progress (at that time)	Mayomat, Valentin	Early ERD/table structure; first SQL draft	docs / database	ERD draft + tables draft committed	10 Oct
Initial Vue skeleton & repo setup	Initial version	Mayomat, Valentin	Vue skeleton (Home/About); folders; .gitignore	frontend / root	Vue app runs; folders created; .gitignore added	17 Oct
Repository structure (front/back/db/docs)	Done	Yohann, Mayomat	Folder tree visible in repo	root	Clean repo, correct folder names	31 Oct
dev branch pushed & workflow	Done	Mayomat	Branch dev on Github	root	Feature branches merge into dev (not main)	31 Oct
UML Use Case (final)	Done	Mayomat, Valentin, Yohann	docs/UML_UseCase.pdf	docs	Include fixed; 'Choose recipe/date' included	31 Oct
Gantt (planned)	Done	Mayomat, Yohann	docs/UML_Gantt.xlsx	docs	Milestones M1-M4 listed only by deadlines	31 Oct
Database schema	Done	Valentin	database/schema.sql	database	All tables created; FKs & constraints ready	31 Oct
Database seed (test data)	Done	Mayomat	database/schema.sql (with INSERTS)	database	Demo data inserted; importable	31 Oct
Frontend (fake JSON)	Done	Mayomat	frontend/src/services/fake/*.json	frontend	3 lists + CRUD in memory; navbar	31 Oct
README and screenshots	To be done (All)	All	README.md; images in docs/ or README	root / docs	Install/run steps and screenshots included	1 Nov
Backend skeleton (Express + MySQL)	To be done (All)	All	backend/src/...;.env.example	backend	App, routes, models, db connection, error handler	3 Nov
UML 2 (Activity + Sequence + Wireframes)	To be done (All)	All	docs/UML_Activity_Sequence_Wireframes.pdf	docs	2 UML diagrams + 3 wireframes in one PDF	5 Nov
Final documentation & merge to main	To be done (All)	All	README.md; merged repository	root	Everything integrated; demo-ready	7 Nov

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.