RestfulAPI

- Creates an account.
- Gets a profile data.
- Authenticates a user.
- Get all ingredients in the database.
- Search for recipes with a given list of ingredients.
- Modifies the meal plan for a user.
- Modifies the user's consumed daily calories by eating a meal.
- Adds favorite recipes to the user's profile.
- Removes favorite recipes from the user's profile.

(left column)	• DAO • RecipeRecommender • CaloriesWatcher

Profile

- Encapsulates user's data such as his name, credentials, favorite recipes, daily calories, meal plan, and body information.
- Calculates the amount of calories the user should consume daily based on his body information.
- Modifies the meal plan by adding recipes to the user calendar.

(left column)	• ProfileBuilder • BodyInfo • UserCredentials • Calendar

ProfileBuilder

- Builds the profile for a new user during the creation of his account.
- Sets initial attributes like the user's name, credentials, photo, and body information.

(left column)	• Profile

Recipe

- Represents all information about a recipe, including its name, ingredients, nutritions, photo, cuisines, and tags.

- RecipeBuilder
- DAO
- CaloriesWatcher
- Nutrition

RecipeBuilder

- Builds the contents of a recipe during its creation.
- Sets initial attributes like the recipe's name, ingredients, photo, nutrition, cuisines, and tags.
- Cancel the recipe's building if its creation is aborted by the user.

- Recipe

DAO

• Communicates with the database for the following purposes: • Add a new profile • Get a profile • Get a recipe by its ingredients • Get a recipe by its ID • Get all ingredients • Add a favorite recipe to a user's profile • Delete a favorite recipe from a user's profile • Get authentication credentials	• Database • Profile • Ingredient • RecipeRecommender • RestfulAPI

Database

• Maintaining a singleton representing the database. • Sending queries to the database server and receiving its response.	• DAO

CaloriesWatcher

• Calculates the number of calories in a certain ingredient. • Calculates the number of calories in a certain recipe. • Modifies the user's consumed daily calories by eating a meal.	• RestfulAPI • Recipe

RecipeRecommender

- Recommends recipes for a user given its past activities and preferences.

- DAO

Ingredient

- Encapsulates ingredient's data such as its name, id, weight, icon, and nutrition.

- DAO
- Nutritions

Nutritions

- Encapsulates recipe or ingredient's nutrition data such as number of calories, amount of protein, carbohydrates, and fats.

- Recipe
- Ingredient

UserCredentials

- Encapsulates user's credential data such as his email, hashed password, and account's id.

- Profile

BodyInfo	
• Encapsulates user's data such as his height, weight, and age.	• Profile

Calendar	
• Encapsulates user's meal plan data such as his planned recipes for each day.	• Profile