

Databases Project Assignment 2 FlavorFinder

Entity → Tables

- Each entity set → one table
 - User → User(userID, name, email)
 - Recipe → Recipe(title, cuisine, difficulty, prepTime)
 - Ingredient → Ingredient(name, type)
- No alternatives needed here; standard entity-to-table mapping applies.

Relationships → Tables

- Each relationship becomes a table if it's many-to-many:
 - Favourite(userID, RecipeTitle)
 - Many users can favorite many recipes.
 - Provide(userID, IngredientName)
 - Many users can provide many ingredients.
 - Contains(RecipeTitle, IngredientName, quantity, units)
 - Many recipes contain many ingredients with extra attributes.
- No alternatives here either; attribute-bearing and many-to-many relationships require separate tables.

ISA Hierarchies

- The ER diagram includes two ISA hierarchies:
 - Recipe ISA EasyRecipe, HardRecipe
 - Ingredient ISA MainIngredient, OtherIngredient
- Alternatives exist so single-table inheritance is utilized because:
 - There is no subclass-specific attributes.
 - The parent tables already include discriminator fields:
 - difficulty in Recipe (easy/hard)
 - type in Ingredient (main/other)
- Thus, all subclasses were merged into their parent tables and used ENUMs to distinguish types.

It is to be noted that the diagram remains unaltered from assignment 1.

Repository:

https://github.com/Kats-19/Database-Project_FlavorFinder/blob/main/flavorfind_schema.sql