### **Project Idea**

#### 1. Short Description:

The Recipe Management app is a mobile application designed for individuals who enjoy cooking and want to organize their favorite recipes.

This app allows users to create, store, and manage their recipes, providing a simple and intuitive interface.

The app categorizes recipes, includes a "Difficulty Level" attribute, and offers offline access to your recipe collection.

# 2. Domain Details (Entity: Recipe):

Title (Text): The name of the recipe.

Ingredients (Multiline Text): A list of ingredients required for the recipe.

Instructions (Multiline Text): Step-by-step instructions on how to prepare the recipe.

Difficulty Level (Number): A numeric field representing the difficulty level of the recipe (e.g., 1 for easy, 2 for medium, 3 for difficult).

Cooking Time (Text): The estimated time it takes to prepare and cook the recipe.

### 3. CRUD Operations for Recipe Entity:

- -Create: Users can add new recipes by entering a title, ingredients, instructions, specifying the difficulty level, and estimating the cooking time.
- -Read: Users can view a list of saved recipes, click on a recipe to see its details, and search/filter recipes by title, difficulty level, or cooking time.
- -Update: Users can edit and update existing recipes, modifying details such as ingredients, instructions, difficulty level, and cooking time.
- -Delete: Users can remove recipes they no longer want to keep in their collection.

#### 4. Persistence Details:

Local Database: All CRUD operations (Create, Read, Update, Delete) are persisted on the local database for quick access, even when offline.

Server: Create, Update, and Delete operations are synchronized with the server to ensure data backup and accessibility across devices.

#### 5. Offline Access Scenarios:

Create (Offline): When offline, a user can create a new recipe. The app stores it locally, and when the device goes online, it syncs the new recipe with the server.

Read (Offline): Users can access and view previously saved recipes offline, as they are stored in the local database.

Update (Offline): Users can make edits to existing recipes while offline. The changes are saved

locally and later synced with the server when online.

Delete (Offline): If a user decides to delete a recipe while offline, the app marks it for deletion and executes the action when online.

## 6. App Mockup

https://www.figma.com/file/Oen8CKe6ecmJuA3jBrssFD/Mobile-App-Project-Idea?type=design&node-id=0%3A1&mode=design&t=I6IZOISVt1XWBrC4-1

