

Project Idea – Mobile Applications

Digital Pantry

1. Short description:

The Digital Pantry application allows you to manage and organize your pantry in a nice, easy to read list.

The application allows for an easy management of the pantry. You can read the list, add new groceries, delete old ones, or update the details of some ingredient.

The app can be of great help when trying to organize your groceries, see if anything is about to go past its expiration date, or check what vegetables you have left in the pantry.

The constant fear of having forgotten something when going shopping for groceries can be a thing of the past. You can check what ingredients you might be missing for the Lasagna you are planning on cooking.

2. Domain Details

The main entity of the application is a grocery product

The product has multiple properties:

- a. Name: The name of the product
- b. Category: The category that the product is a part of (Dairy, Fruit, Vegetables, Sweets, and others)
- c. Brand: The name of the company producing / selling the product
- d. Quantity: The sheer quantity of the product
- e. Best before date: The date before which the product should be consumed

3. Create Read Update Delete

When using the application, you have the possibility to perform 4 main actions on your pantry list.

First, you can add a new grocery item to your list, by simply writing the details required on the adding page, detail which can be found on the product of the product you are willing to add

Then you can simply view all the products that you have added to your grocery list, view only the products from a category, or sort the products by their best before date.

Next, you can update the details of the product, just in case you made a mistake when adding it to your list

Last but not least, you are able to delete a product when you no longer have it in your pantry.

4. Data Persistence

The application can be used whether your device is online or offline. When performing an add, update or delete, the changes that are made will be reflected on the server and the local database in the following ways.

- a. When the device is online the changes will be made on the server directly, so the changes will be visible right away
- b. When the application is offline, the changes will be reflected on a local save of the database, and later added to the server when the device is back online

5. Offline mode

When your device is offline, the operations will be affected in the following way:

- a. Reading the list: you will be shown a version of the list that is saved locally, the last version of the list before the device went offline
- b. Adding a product: You will be able to add a product, which will be added to the local save of the database, then added to the server when the device is back online
- c. Update a product: You will be able to update the details of a product, which will be updated on the local database, then the update will be uploaded to the server when the device is back online
- d. Delete a product: You will be able to delete a product, which will be deleted from the local database, then the delete will be performed on the server when the device is back online