Manage expenses

**A short description,. Note that the client is not having a technical background.**

I'm seeking an app to simplify my expense management. I envision an app that allows me to:

* Create distinct categories of expenses for better organization.
* Easily add, delete, and update expenses within these categories.
* Gain insights into my monthly spending habits.
* When adding an expense, I should be able to:
  + Select the expense category or create a new one.
  + Specify the name of the expense.
  + Enter the price of the expense in any currency.
  + Add a brief description.
* Have the ability to see the totals of each expense category in any currency of my choice, with the app automatically converting expenses to the desired currency.

**Domain details. Present the details of the entities that will be persisted. Each field should have a description.**

**Class Expense**:

* **ID**: An identifier for the expense.
* **Category\_ID**: The identifier of the category to which the expense belongs.
* **Name**: The name of the expense.
* **Currency\_ID**: The identifier of the currency in which the expense is recorded.
* **Amount**: The amount of money spent on the specified expense.
* **Date**: The date when the expense was made.
* **Description**: An optional short description of the expense.

**Class Category**:

* **ID**: An identifier for the expense category.
* **Name**: The name of the category.

**Class Currency**:

* **ID**: An identifier for the currency.
* **Name**: The name of the currency.

**CRUD. Present the details of each crud operation. - create. - read. - update. - delete.**

Class Expense

* **CREATE**: This operation allows the creation of a new expense within the specified category. It includes defining the category, name, currency, amount, and an optional description.
* **READ**: The READ operation displays the expense information to the user within the specified category, including: Expense – CategoryName, Name, Currency, Amount, and Description.
* **UPDATE**: Users can modify the expense's category, name, currency, amount, and description.
* **DELETE**: This operation enables users to delete an expense from the records.

**Persistence details, what crud operations are persisted on the local db and on the server.**

When the device is online, both the local database and the server should be updated with user-initiated changes (Add, Update, Delete).

When the device is offline, the local database stores the changes made by the user (Add, Update, Delete). These changes will be synchronized with the server when the device regains an internet connection.

Regardless of the device's online or offline status, the app should enable users to see totals of category expenses under various conditions:

* Totals can be calculated when expenses have the same currency.
* Totals can be calculated when expenses have different currencies.
* Users can choose to view the total in a different currency when expenses have the same currency.

**Details on what is happening when the device is offline.**

When the device is offline, the user can add, delete, and update expenses. These changes will be stored locally and will be synchronized with the server when an internet connection is reestablished.

While offline, the user can see totals of category expenses under the condition that expenses have the same currency. For cases where expenses have different currencies, the app should clearly indicate that this feature is temporarily inactive. Users can access this feature when the device is online and the server has synchronized the data.

**App mockup. Eg. using figma.com or sketch.com or something equivalent. The screenshots should be attached to the assignment.**

