Personal Budget Management App

A group of users is managing their financial budget using a mobile application. Each user can track and analyze their expenses and income.

On the server side, at least the following details are maintained:

- Id - the unique identifier for the transaction. Integer value greater than zero.
- Date - the date when the transaction occurred. A string in the format "YYYY-MM-DD".
- Amount - the amount of the transaction. A decimal value.
- Type - the type of transaction (e.g., income or expense). A string of characters.
- Category - the category of the transaction (e.g., food, rent, entertainment). A string of characters.
- Description - a description of the transaction. A string of characters.

The application should provide at least the following features:

● Main Section (separate screen/activity)

A. (1p) View the list of transactions. Using the **GET /transactions** call, users can retrieve all their transactions. If offline, the app will display an offline message and provide a retry option. Once retrieved, the data should be available on the device, regardless of whether online or offline.

B. (2p) By selecting a transaction, the user can view its details. The **GET /transaction** call will retrieve specific transaction details. Once retrieved, the data should be available on the device, regardless of whether online or offline.

C. (1p) Add a new transaction. Users can create a new transaction using the **POST /transaction** call by specifying all transaction details. Available online only.

D. (1p) Delete a transaction. Users can delete a transaction using the **DELETE /transaction** call by selecting it from the list. Available online only.

● Reports Section (separate screen/activity)

(1p) View monthly spending analysis. Using the **GET /allTransaction** call, the app will retrieve all transaction and compute the list of monthly total spending, displayed in descending order of expenses.

● Insights Section (separate screen/activity)

(1p) View the top 3 categories by spending. Using the same **GET /allTransactions** call, the app will compute and display the top 3 spending categories and their total amounts in descending order.

● (1p) When a new transaction is added, the server will use a WebSocket channel to send the transaction details to all connected clients. The app will display the received data in human-readable form (e.g., as a toast, snackbar, or dialog).

(0.5p) A progress indicator will be displayed during server operations.

(0.5p) Any server interaction errors will be displayed using a toast or snackbar, and all interactions (server or DB) will log a message.