---------------------- Project Requirement -----------------------

For the project requirement of a Monthly Bill Tracker application, a comprehensive set of specifications is outlined below, covering the core functionalities, data management, user interface, and additional recommended features. This structure is designed to ensure clarity, user-friendliness, and effectiveness in managing and tracking bills.

### 1. Project Overview

The Monthly Bill Tracker application is designed to help users efficiently manage and track their bills, incorporating various categories and frequencies. It provides an overview of monthly expenditures in different currencies, facilitating better financial planning and budget management.

### 2. Core Features and Functional Requirements

#### 2.1 Bill Information Management

- \*\*Requirement ID:\*\* FR1

- \*\*Description:\*\* The system must allow users to input, view, edit, and delete bill information.

- \*\*Details:\*\*

- \*\*Bill Name:\*\* Descriptive identifier for the bill (e.g., "Netflix Subscription," "Apartment Rent").

- \*\*Bill Date:\*\* The date the bill is due.

- \*\*Bill Amount:\*\* Monetary value of the bill.

- \*\*Currency:\*\* Support for multiple currencies including USD, INR, EUR with the ability to add more if needed.

#### 2.2 Bill Frequency Management

- \*\*Requirement ID:\*\* FR2

- \*\*Description:\*\* Users should be able to set the frequency of each bill.

- \*\*Options:\*\* Monthly, Biweekly, Quarterly.

#### 2.3 Bill Categorization

- \*\*Requirement ID:\*\* FR3

- \*\*Description:\*\* Bills can be categorized for better organization and tracking.

- \*\*Categories:\*\* Subscription, Rent, Child Care, Tuition, and the ability to add custom categories.

#### 2.4 Monthly Spending Overview

- \*\*Requirement ID:\*\* FR4

- \*\*Description:\*\* Provide a dashboard or summary view showing the total amount spent per month, categorized by bill type.

- \*\*Functionality:\*\* Graphical representation (e.g., pie chart, bar graph) of spending in each category.

### 3. Data Storage and Management

- \*\*Database Design:\*\* A relational database schema to store user information, bill details, categories, and transactions.

- \*\*Security:\*\* Ensure data protection and privacy with encryption for sensitive information.

### 4. User Interface Requirements

- \*\*User-Friendly Design:\*\* Intuitive navigation and interaction for managing bills.

- \*\*Responsive Design:\*\* Compatibility with various devices (smartphones, tablets, and desktops).

- \*\*Accessibility:\*\* Ensure accessibility for users with disabilities, following WCAG guidelines.

### 5. Additional Features

#### 5.1 Notifications and Reminders

- \*\*Description:\*\* The system should send reminders before a bill is due and notifications for overdue bills.

#### 5.2 Report Generation

- \*\*Description:\*\* Capability to generate detailed reports on spending patterns and history.

#### 5.3 Export and Import Functionality

- \*\*Description:\*\* Allow users to export their bill data and import it for backup or migration purposes.

### 6. Performance and Scalability

- \*\*Requirement:\*\* The application must handle a large volume of data efficiently and be scalable to accommodate a growing number of users.

This document lays out the initial project requirements for the Monthly Bill Tracker application. It’s essential to consider iterative feedback and testing throughout the development process to refine these requirements and add new features based on user needs and technological advancements.

----------------- User stories and journeys ------------------------

Based on the project requirements for the Monthly Bill Tracker application, let's develop user stories and journeys to illustrate how users will interact with the application, focusing on their needs and how the application will meet those needs. This will guide the development process by prioritizing user satisfaction and ease of use.

### User Stories

1. \*\*As a user, I want to add a new bill, so that I can keep track of my upcoming payments.\*\*

- \*\*Acceptance Criteria:\*\*

- Can input bill name, amount, due date, and currency.

- Can select or add a new category for the bill.

- Can set the bill's frequency (e.g., monthly, biweekly, quarterly).

2. \*\*As a user, I want to view all my bills for the current month, so I can understand my monthly financial obligations.\*\*

- \*\*Acceptance Criteria:\*\*

- Can see a list of all bills due in the current month.

- The list shows the bill name, amount, due date, and category.

3. \*\*As a user, I want to edit a bill's information, so I can correct or update bill details as needed.\*\*

- \*\*Acceptance Criteria:\*\*

- Can select a bill and edit its name, amount, due date, currency, and category.

- Can change the bill's frequency.

4. \*\*As a user, I want to delete a bill, so that I can remove bills that are no longer relevant.\*\*

- \*\*Acceptance Criteria:\*\*

- Can select a bill and delete it.

- Receives a confirmation prompt before the bill is permanently deleted.

5. \*\*As a user, I want to receive reminders for upcoming bills, so I can ensure timely payments.\*\*

- \*\*Acceptance Criteria:\*\*

- Receives notifications for each bill a few days before its due date.

- Can customize how many days in advance to receive reminders.

6. \*\*As a user, I want to view a summary of my monthly spending, so I can better understand my financial habits.\*\*

- \*\*Acceptance Criteria:\*\*

- Can view a dashboard with graphs showing spending by category.

- Can see total spending for the current month compared to previous months.

7. \*\*As a user, I want to generate reports on my spending, so I can analyze my financial habits over time.\*\*

- \*\*Acceptance Criteria:\*\*

- Can generate reports based on time period and category.

- Can view, save, and print reports.

8. \*\*As a user, I want to export my bill data, so I can back up or migrate my information easily.\*\*

- \*\*Acceptance Criteria:\*\*

- Can export data in a common file format (e.g., CSV, Excel).

- Includes all bill details and categories in the export.

### User Journeys

#### New User Onboarding

1. \*\*Creating an Account and First Login:\*\*

- A user signs up for the Monthly Bill Tracker app, enters their personal information, and creates an account.

- Upon first login, the user is greeted with a tutorial that guides them through adding their first bill, categorizing it, and setting up a reminder.

2. \*\*Adding and Managing Bills:\*\*

- The user adds several bills, categorizing them and setting different frequencies.

- The user edits bill details as needed and deletes a bill that has been paid off.

3. \*\*Viewing Monthly Summaries and Setting Reminders:\*\*

- The user views their monthly spending summary on the dashboard, identifying spending patterns.

- The user sets up reminders for their most critical bills to avoid late payments.

4. \*\*Advanced Features Exploration:\*\*

- The user explores additional features like report generation and data export.

- The user customizes the notification settings to their preference.

This sequence of user stories and journeys provides a comprehensive overview of how individuals will interact with the Monthly Bill Tracker application, ensuring the design and development phases are aligned with user needs and preferences.