**FAMILY MANAGER**

**Description:**

Families often struggle to maintain their household consumption, expenses and shopping efficiently. Grocery items and daily essentials are overstocked (leading to wastage) or understocked (leading to inconvenience, and last-minute rush). Traditional manual methods of tracking usage may fail based on how long an item will last be based on average human consumption. Also, family trip or a solo trip temporarily alter the consumption pattern and budgets

So, the family is supposed to log the number of family members, and log their average consumption or use the prescribed average consumption of the product, and their travel plans (How many days? How many people?). Whenever the product/Item is going to end, then they’ll get a reminder message, or the product will be added to their shopping cart automatically.

**What does Family Manager do?**

1. Inventory Management: Logging purchased items, tracking average consumption, and predicting the date to restock the item.
2. Expenses and Budget tracking: Records purchases and analyze monthly spending.
3. Consumption prediction: Automatically adjusting product longevity during trips/events.
4. Reminders: Notifying the admin to restock the items.
5. Multi-user access: Allowing all the family members to log and stay updated.

Entities:

1. User: user\_id (PK), name, mobile number, role (Admin/Member).
2. Product: product\_id (PK), name, item\_price, category, units (grams, liters), average\_consumption, pack\_size.
3. Inventory: inventory\_id (PK), product\_id (FK), item\_price, purchased\_date, quantity\_purchased, stock\_available, end\_date.
4. Trip: trip\_id (PK), start\_date, end\_date, budget.
5. TripExpenses: expense\_id (PK), trip\_id (FK), category (Food/Travel/Stay/Others), amount.
6. Reminder: reminder\_id (PK), product\_id (FK), reminder\_date.

A diagram of a flowchart

AI-generated content may be incorrect.

Master Table: Product table here is the master table since all the inventory, reminder and stock tracking depend on it.

Transaction Table: Inventory, reminder, trip and trip expenses are transaction tables are frequently changing.