**CYNOSURE 2025**

**Problem Statement :**

Build a tool to turn a grocery list into a budget tracker.

**Problem approach :**

Many people struggle with overspending while grocery shopping because they don’t track their expenses in real-time. A simple grocery list tells them what to buy, but it doesn’t help them stay within a budget.

**users:**  
✅ Plan their grocery expenses before shopping.  
✅ Track total costs dynamically as they add or remove items.  
✅ Compare their spending with a preset budget.  
✅ Get insights into their spending habits over time.

**Key Requirements & Features**

**User Inputs a Grocery List**

* Users should be able to enter items with details like:
  + **Item Name** (e.g., "Milk")
  + **Quantity** (e.g., "2 Liters")
  + **Price per Unit** (e.g., "₹50 per liter")
* Optionally, categorize items (e.g., Dairy, Vegetables, Snacks).

**Real-Time Budget Tracking**

* The app should calculate the **total cost** dynamically.
* Users should be able to **set a budget limit** (e.g., ₹1000).
* Provide alerts if the total exceeds the budget.

**Data Storage & History**

* Save previous grocery lists so users can compare past expenses.
* Use **Local Storage, Firebase, or a Database** for persistence.

**Example Scenario**

Imagine a user named **Ravi** who sets a budget of ₹2000 for groceries. He adds:

* **Rice (5kg @ ₹50/kg) → ₹250**
* **Milk (2L @ ₹60/L) → ₹120**
* **Vegetables (₹300 total)**
* **Snacks (₹150 total)**

🔹 The app calculates the total: **₹820 so far**  
🔹 If Ravi adds more and reaches **₹2000**, the app **warns him**.  
🔹 If he exceeds the budget, it suggests **removing an item or reducing quantity**.

**How to Approach the Project**

**Define the UI** – Sketch a simple layout (input fields, budget bar, item list).  
**Set Up Functionality** – Add logic for adding items, calculating totals, and setting budget alerts.  
 **Store Data** – Use local storage or a database to save lists.  
 **Enhance with Features** – Implement graphical insights, price tracking, and discounts if possible.