### **Salesforce Project**

### **Project Title : The Home Maintenance & Repair Tracker**

**Home Maintenance and Repair Tracking:** A system to manage the maintenance and repair of home assets like appliances and electronics. This system will track each asset's details, schedule routine maintenance, log repairs, and provide a comprehensive history of all work performed. We will use **custom objects** to model assets and events, **Flows** for automation, and **reports and dashboards** to visualize data. By doing so, we can prevent overdue maintenance and gain insights into repair costs and frequency.

**Phase 1: Problem Understanding & Industry Analysis**

* **Requirement Gathering (What to Track):**
  + **Assets:** What are the core items in the home to track? This means creating a custom object called "Home Asset" to capture details like:
    - Asset Name (e.g., HVAC System, Refrigerator, Lawn Mower)
    - Manufacturer (e.g., GE, Carrier)
    - Model Number
    - Serial Number
    - Purchase Date
    - Warranty Expiration Date
    - Photo
  + **Maintenance & Repairs:** How do I log work done on these assets? This requires a custom object called "Maintenance Event" or "Work Order" to track:
    - Date of Service
    - Type of Service (e.g., Repair, Routine Maintenance, Cleaning)
    - Cost
    - Notes/Description of Work
  + **Scheduled Tasks:** How do I plan for future work? This could be a custom object called "Maintenance Schedule" that links to an asset and contains fields like:
    - Frequency (e.g., "Every 6 months," "Annually")
    - Next Due Date
* **Stakeholder Analysis:**
  + **End-User:** You, the homeowner. The application must be easy to use on a mobile device so you can quickly log a new maintenance event right after it happens. The key is to reduce friction and make data entry as simple as possible.
  + **Admin/Developer:** You, again. The implementation needs to be scalable, meaning the data model should be well-structured with clear relationships. Automation should reduce manual effort as much as possible.
* **Business Process Mapping:**
  + **Asset Onboarding:** A user acquires a new home appliance or piece of equipment and creates a new **Home Asset** record in Salesforce, entering all relevant information.
  + **Maintenance Scheduling:** The user creates a **Maintenance Schedule** record for a given asset, specifying the required frequency (e.g., "replace A/C filter every 3 months").
  + **Task Automation:** A scheduled Flow runs automatically to check for upcoming maintenance due dates and sends an email reminder to the user.
  + **Service Logging:** A user logs a **Maintenance Event** for a specific asset, providing details about the work performed, the cost, and who performed it.
  + **Historical Analysis:** The user can view a complete history of all maintenance and repairs for a single asset, or run reports to compare costs across different assets.
* **Industry-specific Use Case Analysis:**
  + **Field Service Management:** This is the most direct parallel. You are essentially a one-person field service team for your own home. The "Home Asset" is the customer's asset, the "Maintenance Event" is a work order, and the "Maintenance Schedule" is a maintenance plan. This is a core concept in the Salesforce Field Service product, which this project mimics on a smaller, declarative scale.
  + **Asset Management:** This project is a foundational asset management system. It tracks the entire lifecycle of an asset, from initial purchase and warranty information to all subsequent service and repair events. This is a critical business need for companies that manage customer-owned products or their own internal equipment.
  + **Case Management:** A repair request could be modeled as a "case." If an appliance breaks, you could create a case to track the problem, and then close the case when the repair is complete and a "Maintenance Event" record is logged. This shows an understanding of the Case Management lifecycle.
* **AppExchange Exploration:**.

Explore applications related to "asset management," "field service," or "preventive maintenance" to discover solutions that automate many of your current processes. For instance, some applications can automatically generate work orders as a maintenance schedule's due date approaches. By analyzing these apps, we can gain insights into best practices for real-world data modeling and workflow design.