Ideation Phase

Problem Statement

Date	01-11-2025
Team ID	NM2025TMID08208
Project Name	Garage Management System

1. Background and Context

Automobile garages play a vital role in ensuring vehicle maintenance, customer satisfaction, and operational efficiency. However, many garages still rely on **manual methods**—paper records or spreadsheets—to track customers, vehicles, services, and billing.

Such outdated processes often result in inefficiencies and errors that affect both business operations and customer experience.

Key Issues Identified:

Service Delays: Poor scheduling or missed appointments lead to reduced customer trust.

Billing Errors: Manual calculations cause inconsistent invoices and payment confusion.

Data Inaccuracy: Lack of centralized data results in duplicate entries and record loss.
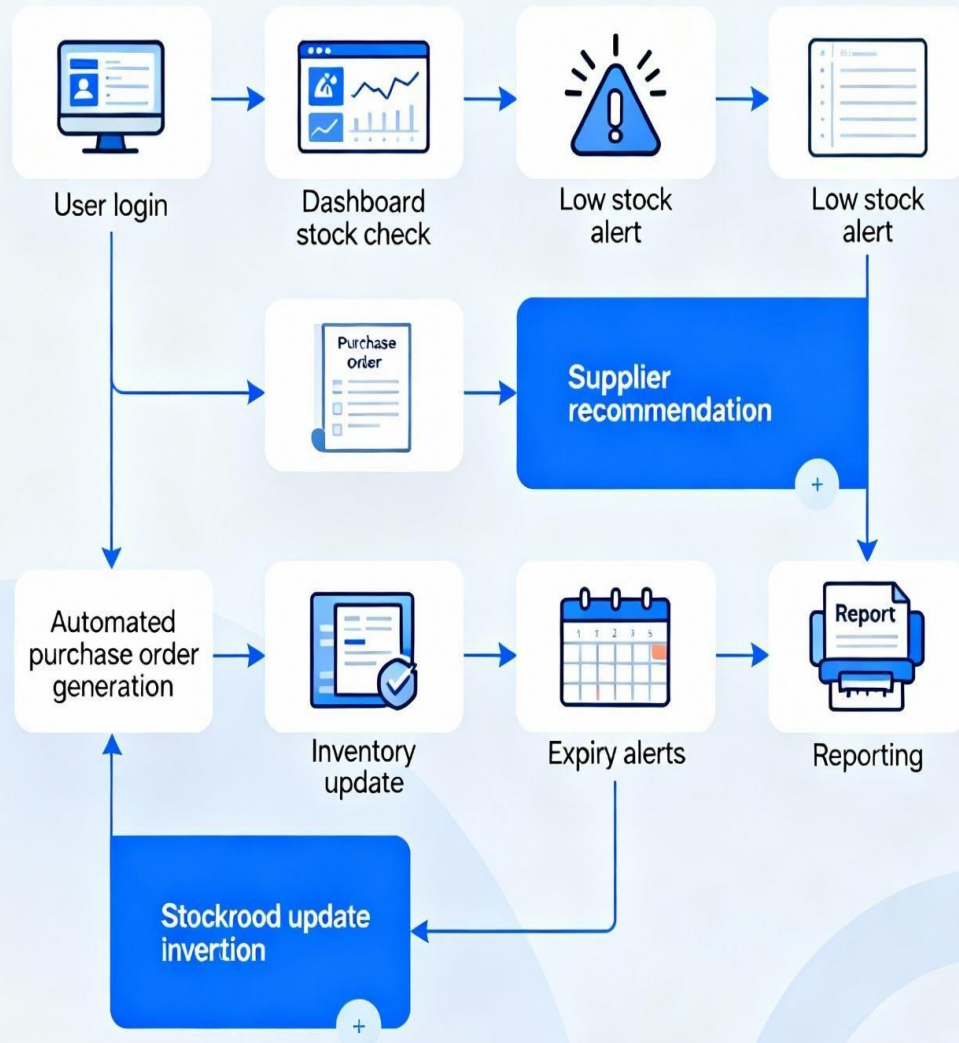
Case Example:

A mid-sized garage records service details manually in notebooks. Once, a mechanic's completed service was not updated in the record, causing duplicate billing and a customer dispute. The owner realized that without a centralized system, maintaining accurate service data and customer satisfaction was impossible.

Key Requirements Identified:

1. Centralized customer and vehicle management.

2. Automated service scheduling and tracking.

3. Error-free billing and payment management.

4. Mechanic performance reporting and dashboards.

Worflow

User login → Dashboard stock check → Low stock alert → Low stock alert

Purchase Order → Supplier recommendation +

Automated purchase order generation → Inventory update → Expiry alerts → Reporting

Stockrood update invertion +

2. User Pain Points

Garage Manager

1. Spends time manually assigning mechanics and tracking daily services.

2. Faces challenges in monitoring business performance.

3. Struggles to identify peak service hours or customer trends

Service Staff

1. Has to manually record customer and vehicle details.

2. Faces confusion when service data is missing or duplicated.

3. Difficult to generate invoices quickly and accurately.

Mechanic

1. Lacks visibility into assigned services and schedules.

2. Relies on staff for service updates and feedback.

3. No digital method to update service completion status.

Quote Examples:

"Sometimes, I can't tell which service requests are pending until customers call."

"Preparing invoices manually after every repair is time-consuming."

3. Proposed Solution

The **Garage Management System (GMS)** built on **Salesforce CRM** will provide a **centralized, automated, and cloud-based solution** to streamline garage operations from service booking to billing.

 Key Features:

Customer Management: Maintain complete customer profiles and contact details.

Vehicle Management: Store vehicle information linked to respective customers.

Service Request & Scheduling: Create, assign, and track service jobs in real time.

Billing & Feedback: Automatically generate invoices and collect service feedback.

Reports & Dashboards: Monitor revenue, service types, and mechanic performance.

Workflow Example:
1. Staff logs into the Salesforce dashboard.

2. A new service request is created and assigned to a mechanic.

3. Mechanic updates the service status after completion.

4. Billing details are automatically generated and emailed to the customer.

5. Payment status and feedback are updated in real time.

6. Dashboard displays daily revenue and completed service count.

Benefits:
1. Reduction in manual workload and errors.

2. Faster and more accurate billing.

3. Improved customer transparency and satisfaction.

Garage Management System Workflow & Benefits

Workflow	Benefits
User logs in	Data accuracy with validation rules
Vehicle registration	Duplicate prevention
Service appointment	Real-time dashboards/reports
Billing and payment	Feedback request
Mechanic asignment	Financial insights

Customer Satisfaction and Business Growth