Define the Problem Statements

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Team ID	LTVIP2025TMID31275
Project Name	Garage Management System
Maximum Marks	2 Marks

Problem Statements for Garage Management System (GMS)

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1. Inefficient Appointment Scheduling

Problem:
Manual appointment booking through phone calls or walk-ins leads to overlapping schedules, long wait times, and miscommunication.

Implication:
This causes customer dissatisfaction and under-utilization or overburdening of mechanics.

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2. Lack of Centralized Customer & Vehicle Records

Problem:
Customer and vehicle history is often stored in paper files or isolated spreadsheets, making it difficult to retrieve information quickly.

Implication:
This leads to repeated data entry, poor service tracking, and loss of valuable customer insights.

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3. Poor Mechanic Assignment Process

Problem:
Work allocation to mechanics is done manually without considering workload, specialization, or availability.

Implication:
This results in inefficient use of human resources and delays in service completion.

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4. Inaccurate or Delayed Invoicing

Problem:
Service billing is often prepared manually after job completion, leading to errors, missing charges, and time delays.

Implication:
This causes revenue leakage, accounting issues, and customer disputes.

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5. No Real-Time Service Updates

Problem:
Customers are not informed about the current status of their vehicle, leading to uncertainty and repeated inquiries.

Implication:
Reduces customer satisfaction and increases load on support staff.

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6. Inventory Tracking Challenges

Problem:
Spare parts inventory is not properly tracked, leading to unavailability of parts during service or overstocking.

Implication:
Delays repairs and increases operational costs.

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7. Lack of Data-Driven Decision Making

Problem:
Garages lack structured reporting on performance, revenue, and resource usage.

Implication:
Business decisions are made without reliable metrics, affecting growth and profitability.

Customer Problem Statement Template – Garage Management System

Problem Statement (PS)	I am (Customer)	I'm trying to...	But...	Because...	Which makes me feel...
PS-1	a car owner with limited free time	book a garage appointment quickly and easily	the process is manual and requires phone calls	there's no online booking or confirmation system	frustrated, anxious about delays

Problem Statement (PS)	I am (Customer)	I'm trying to...	But...	Because...	Which makes me feel...
PS-2	someone unfamiliar with car repairs	understand the status of my vehicle repair	I receive little to no updates from the garage	they don't offer real-time tracking or proactive communication	uninformed and unimportant
PS-3	a repeat customer	keep a record of my past services and bills	I have to ask or re-submit details every time	the garage doesn't store vehicle service history in one place	annoyed and undervalued
PS-4	a fleet manager	manage multiple vehicles and service requests	I can't track service schedules and vehicle status easily	the garage has no dashboard or centralized vehicle tracking system	overwhelmed and out of control
PS-5	a working professional	pick up my car without waiting in long queues	there's no time estimate or alert when service is done	I don't know when the repair is finished until I call	impatient and time-wasted