

# Project Design Phase

## Problem – Solution Fit Template

Date	07 NOV 2025
Team ID	NM2025TMID07047
Project Name	Garage Management System
Maximum Marks	4 Marks

### Product Backlog, Sprint Schedule, and Estimation (4 Marks)

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1	Customer & Vehicle Registration Service	USN-1	As an admin, I can register new customers and their vehicles in the system.	3	High	N. Durga Mahendra
	Category Management	USN-2	As a garage manager, I can add and manage different service categories (e.g., Manoj Management repair, wash, maintenance).	2	High	R. S. S. service categories (e.g., Manoj Management repair, wash, maintenance).
Sprint-2	Job Assignment	USN-3	As a manager, I can assign jobs to mechanics based on skill and availability.	3	High	N. Gowtham
	Inventory Tracking	USN-4	As an admin, I can update and monitor spare parts inventory.	4	High	O. Sravani
Sprint-3	Billing and Payment	USN-5	As a cashier, I can generate invoices and manage Mahendra	4	Medium	N. Durga


## Project Tracker, Velocity & Burndown Chart (4 Marks)

Total	Sprint	Story Points			Sprint End	Sprint Release
Sprint	Story	Duration	Start Date	Completed (as on Date (Planned))	Planned End Date	Date (Actual)
Sprint-1	1	15	6 Days	01 NOV 2025	06 NOV 2025	15
Sprint-2	2	18	6 Days	07 NOV 2025	12 NOV 2025	18
Sprint-3	3	20	6 Days	13 NOV 2025	18 NOV 2025	19
Sprint-4	4	15	6 Days	19 NOV 2025	24 NOV 2025	15

### Velocity Calculation

Average Velocity = (Total Story Points Completed) / (Total Duration in Days)  
= (67 Story Points) / (24 Days) = **2.79 Points/Day**

### Burndown Chart

A **Burndown Chart** represents the work remaining versus time across sprints. In this project, tasks such as registration, job management, billing, and reporting are tracked to ensure continuous progress. It helps the team maintain timely delivery and identify workflow bottlenecks.

## **References:**

<https://www.visual-paradigm.com/scrum/what-is-agile-software-development>

<https://www.atlassian.com/agile/tutorials/burndown-charts>

<https://www.atlassian.com/agile/tutorials/sprints> <https://www.atlassian.com/agile/project-management/estimation>

