

## Project Design Phase

### Problem – Solution Fit Template

Date	01 NOV 2025
Team ID	NM2025TMID04625
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	USN-1	As an admin, I can register new customers and their vehicles in the system.	3	High	N. Durga Mahendra
Sprint-1	Service Category Management	USN-2	As a garage manager, I can add and manage different service categories (e.g., repair, wash, maintenance).	2	High	R. S. S. Manoj
Sprint-2	Job Assignment	USN-3	As a manager, I can assign jobs to mechanics based on skill and availability.	3	High	N. Gowtham
Sprint-2	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 payments after services.	4	Medium	N. Durga Mahendra
Sprint-3	Notification System	USN-6	As a customer, I can receive SMS or email notifications about service status and completion.	3	Medium	R. Kiran
Sprint-4	Reports & Feedback	USN-7	As a manager, I can generate daily/weekly reports and view customer feedback.	2	Low	O. Sravani

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

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

### 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>