# Project Planning Phase

## Project Planning Template (Product Backlog, Sprint Planning, Stories, Storypoints)

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|---|---|
| **Date** | **11 NOVEMBER 2022** |
| **Team ID** | **PNT2022TMID27631** |
| **Project Name** | **Car Resale Value Prediction** |
| **Maximum Marks** | **8 Marks** |

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

Use the below template to create product backlog and sprint schedule

| Sprint | Functional Requirement (Epic) | User Story Number | User Story / Task | Story Points | Priority | Team Members |
|---|---|---|---|---|---|---|
| **Sprint-1** | Pre-process data | USN-1 | Collect Dataset | 1 | Low | **Balavignesh** |
| **Sprint-1** | | USN-2 | Import required libraries | 1 | Low | **Jeeveth** |
| **Sprint-1** | | USN-3 | Read and clean data sets | 2 | Low | **Dhanamjayasath & Gopinath** |
| **Sprint-2** | Model building | USN-1 | Split data into independent and dependentvariables | 3 | Medium | **Balavignesh & Dhanamjayasath** |
| **Sprint-2** | | USN-2 | Apply using regression model | 3 | Medium | **Jeeveth & Gopinath** |
| **Sprint-3** | Application building | USN-1 | Build python flask application and HTML page | 5 | High | **Jeeveth** |
| **Sprint-3** | | USN-2 | Execute and test | 5 | High | **Balavignesh** |
| **Sprint-4** | **Training the model** | **USN-1** | **Train machine learning model** | **5** | **High** | **Dhanamjayasath & Jeeveth** |

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|---|---|---|---|---|---|---|
| **Sprint-4** | | **USN-2** | **Integrate flask** | **5** | **High** | **Balavignesh & Gopinath** |

**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 | 20 | 6 Days | 24 Oct 2022 | 29 Oct 2022 | 20 | 29 Oct 2022 |
| Sprint-2 | 20 | 6 Days | 31 Oct 2022 | 05 Nov 2022 | 20 | 05 Nov 2022 |
| Sprint-3 | 20 | 6 Days | 07 Nov 2022 | 12 Nov 2022 | 20 | 12 Nov 2022 |
| Sprint-4 | 20 | 6 Days | 14 Nov 2022 | 19 Nov 2022 | 20 | 19 Nov 2022 |

**Velocity:**

Imagine we have a 10-day sprint duration, and the velocity of the team is 20 (points per sprint). Let's calculate the team's average velocity (AV) per iteration unit (story points per day)

$$AV = \frac{sprint\ duration}{velocity} = \frac{20}{10} = 2$$

**Burndown Chart:**

A burn down chart is a graphical representation of work left to do versus time. It is often used in agile software development methodologies such as Scrum. However, burn down charts can be applied to any project containing measurable progress over time.