

## Project Planning Phase

### Project Planning Template (Product Backlog, Sprint Planning, Stories, Story points)

|               |  |
|---------------|--|
| Date          | 17 November2022  |
| Team ID       | PNT2022TMID46231   |
| Project Name  | Machine Learning Based Vehicle Performance Analyzer 61GB |
| 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 | Registration                  | USN - 1           | As a user, I can register using email and password                                      | 4            | High     | Muthamizhselvan M |
| Sprint-2 |                               | USN - 2           | As a user, I can register using Gmail   | 2            | Medium   | Arikrishnan A     |
| Sprint-1 |                               | USN - 3           | As a user, I will receive confirmation email once I have registered for the application | 1            | Low      | Aravinth S        |
|          | Login                         | USN - 4           | As a user, I can login to my dashboard through emailid and password                     | 2            | High     | Prakashraj K      |
|          | Dashboard                     | USN - 5           | I can access my account details on dashboard  | 1            | Low      | Muthamizhselvan M |
| Sprint-2 | Prediction Model              | USN - 6           | Once I enter the dashboard I can input values for a single sample prediction            | 8            | High     | Arikrishnan A     |

|          |                   |          |  |   |        |                   |
|----------|-------------------|----------|--|---|--------|-------------------|
| Sprint-3 |                   | USN - 7  | I can input values via excel sheet for multiple sample prediction as per the template and perform prediction | 6 | Medium | Muthamizhselvan M |
|          |                   | USN - 8  | As a user I can get visual representation of the prediction  | 4 | Medium | Tamilarasan M     |
|          | Report Generation | USN - 9  | As a user I can view the detailed report of myprediction   | 3 | High   | Aravinth S        |
| Sprint-4 | RestAPI           | USN - 10 | As a developer, I can use API Token to send request to the server  | 3 | Low    | Prakashraj K      |
|          | Documentation     | USN - 11 | As a user I can refer to the documentation and user manual for support and guidance                          | 4 | High   | Arikrishnan A     |
|          |                   | USN - 12 | As a developer, I can refer to technical Documentationfor understanding the application flow                 | 6 | Medium | Aravinth S        |

#### 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 | 8                  | 6 Days   | 24 Oct 2022       | 29 Oct 2022               |   |                              |
| Sprint-2 | 10                 | 6 Days   | 31 Oct 2022       | 05 Nov 2022               |   |                              |
| Sprint-3 | 13                 | 6 Days   | 07 Nov 2022       | 12 Nov 2022               |   |                              |
| Sprint-4 | 13                 | 6 Days   | 14 Nov 2022       | 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)

$$\text{AV} = \text{Velocity} / \text{Sprint duration}$$

| Sprint   | Average Velocity |
|----------|------------------|
| Sprint 1 | 1.33             |
| Sprint 2 | 1.67             |
| Sprint 3 | 2.17             |
| Sprint 4 | 2.17             |

$$\text{Total Average Velocity} = 1.83$$

## Burndown Chart:

A burndown 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.

