

## Project Planning Phase

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

|               |  |
|---------------|--|
| Date          | 10 November 2022                                     |
| Team ID       | PNT2022TMID33544                                     |
| Project Title | Signs With Smart Connectivity for Better Road Safety |
| Maximum Marks | 8 Marks  |

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

| Sprint   | Functional Requirement (Epic)     | User Story / Task   | Story Points | Priority | Team Members   |
|----------|-----------------------------------|---|--------------|----------|--|
| Sprint-1 | Resources Initialization          | Create and initialize accounts in various public APIs like Open Weather API.                    | 1            | LOW      | Kumaresan T<br>Mukesh Kanna M<br>Ajay B<br>Saravanan R |
| Sprint-1 | Local Server/Software Run         | Write a Python program that outputs results given the inputs like weather and location.         | 1            | MEDIUM   | Kumaresan T<br>Mukesh Kanna M<br>Ajay B<br>Saravanan R |
| Sprint-2 | Push the server/software to cloud | Push the code from Sprint 1 to cloud so it can be accessed from anywhere                        | 2            | MEDIUM   | Kumaresan T<br>Mukesh Kanna M<br>Ajay B<br>Saravanan R |
| Sprint-3 | Hardware initialization           | Integrate the hardware to be able to access the cloud functions and provide inputs to the same. | 2            | HIGH     | Kumaresan T<br>Mukesh Kanna M<br>Ajay B<br>Saravanan R |

|          |                                |   |   |     |  |
|----------|--------------------------------|---|---|-----|--|
| Sprint-4 | UI/UX Optimization & Debugging | Optimize all the shortcomings and provide better user experience. | 2 | LOW | Kumaresan T<br>Mukesh Kanna M<br>Ajay B<br>Saravanan R |
|----------|--------------------------------|---|---|-----|--|

Project Tracker, Velocity & Burn down 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  | 02 Nov 2022                  |
| Sprint-3 | 20                 | 6 Days   | 07 Nov 2022       | 12 Nov 2022               | 20  | 09 Nov 2022                  |
| Sprint-4 | 20                 | 6 Days   | 14 Nov 2022       | 19 Nov 2022               | 20  | 17 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 :

