

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

|               |  |
|---------------|--|
| Date          | 29 October 2022  |
| Team ID       | PNT2022TMID40472   |
| Project Name  | Project - 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 Number | User Story / Task  | Story Points | Priority | Team Members  |
|----------|-----------------------------------|-------------------|--|--------------|----------|---|
| Sprint-1 | Resources Initialization          | USN-1             | Create and initialize accounts in various public APIs like OpenWeatherMap API.         | 1            | Low      | Vinoth.E<br>Hariharan.C<br>Thiyagu.E<br>Logeshvaran.T |
| Sprint-1 | Local Server/Software Run         | USN-2             | Write a Python program that outputs results given the inputs like weather and location | 2            | Medium   | Vinoth.E<br>Hariharan.C<br>Thiyagu.E<br>Logeshvaran.T |
| Sprint-2 | Push the server/software to cloud | USN-3             | Push the code from Sprint1 to cloud so it can be accessed from anywhere                | 2            | Medium   | Vinoth.E<br>Hariharan.C<br>Thiyagu.E<br>Logeshvaran.T |

| Sprint   | Functional Requirement (Epic)  | User Story Number | User Story / Task  | Story Points | Priority | Team Members  |
|----------|--------------------------------|-------------------|--|--------------|----------|---|
| Sprint-3 | Hardware initialization        | USN-4             | Integrate the hardware to be able to access the cloud functions and provide inputs to the same | 2            | High     | Vinoth.E<br>Hariharan.C<br>Thiyagu.E<br>Logeshvaran.T |
| Sprint-4 | UI/UX Optimization & Debugging | USN-5             | Optimize all the short comings and provide better user experience                              | 2            | Low      | Vinoth.E<br>Hariharan.C<br>Thiyagu.E<br>Logeshvaran.T |

**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  | 31 Oct 2022                  |
| Sprint-3 | 20                 | 6 Days   | 07 Nov 2022       | 12 Nov 2022               | 20  | 07 Nov 2022                  |
| Sprint-4 | 20                 | 6 Days   | 14 Nov 2022       | 19 Nov 2022               | 20  | 14 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)

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

### Burndown Chart:

#### Balance Work

