

## Project Planning Phase

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

Date	5 November 2022
Team ID	PNT2022TMID08255
Project Name	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	Dynamic Speed Limit	USN-1	As a traveller, it is essential for me to know the speed limit.	7	High	Sangeeth Dhanapal V Saswin Nikil
Sprint-1	Sensor implementation	USN-2	As a traveller, I should concern in traffic density and road condition, pedestrian monitoring and controls traffic signals.	7	Low	Gokulnath Sheik Mohammad Mishaal Nikil
Sprint-1	Weather speed limit	USN-3	As a user, I should be aware of weather influence on speed limit of safer ride. Open weather API has to implement to monitor weather reports.	6	Medium	Sangeeth Dhanapal V Gokulnath Nikil
Sprint-2	Safer Ride	USN-4	As a traveller, I should have a hustle free journey.	12	Medium	Sangeeth Dhanapal V Saswin Nikil

<b>Sprint</b>	<b>Functional Requirement (Epic)</b>	<b>User Story Number</b>	<b>User Story / Task</b>	<b>Story Points</b>	<b>Priority</b>	<b>Team Members</b>
Sprint-2	Transport Agency Registration	USN-4	Register for getting approval to implement the smart sign boards for better road safety	8	Medium	Gokulnath Nikil Saswin
Sprint-3	Login	USN-6	As an administrator, I should have an account on the website.	7	Low	Sangeeth Dhanapal V Saswin GokulNath
Sprint-3	Dashboard	USN-7	As an admin, I should be able to monitor and add sign nodes.	13	Medium	Gokulnath Nikil Saswin
Sprint-4	Monitoring	USN-8	As an admin, I must control and monitor the proper functioning of the sign through rarely required.	9	Low	Gokulnath Sheik Mohammad Mishaal Nikil
Sprint-4	More accurate indications	USN-9	As a user, as days pass by, more accurate guidance is needed.	4	Low	Gokulnath Nikil Saswin
Sprint-4	Information Sharing Once the	USN-10	Once the situation detected the user get information via the digital display who travels along the road also it will update in the platform, so others plan accordingly	7	High	Sangeeth Dhanapal V Saswin GokulNath

### 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)

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

## 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.

