

## Project Planning Phase

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

Date	31 October 2022
Team ID	PNT2022TMID27330
Project Name	Project – Signs with Smart Connectivity for Better Road Safety
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 on the website by entering my email, password, and confirming my password.	3	High	Anupama PH, Naveen Kumar Sai T, Ragini Kumari, Praveen Sharma
	Registration	USN-2	As a user, I will receive confirmation email once I have registered on the website.	3	High	Anupama PH, Naveen Kumar Sai T, Ragini Kumari, Praveen Sharma
	Login	USN-3	As a user, I can log into the website by entering email & password.	1	Low	Anupama PH, Naveen Kumar Sai T, Ragini Kumari, Praveen Sharma
	Develop UI	USN-4	Develop UI for the website	3	High	Anupama PH, Naveen Kumar Sai T, Ragini Kumari, Praveen

						Sharma
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Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-2	Dashboard	USN-1	As a user, I can view details of road rules and safety.	2	Medium	Anupama PH, Naveen Kumar Sai T, Ragini Kumari, Praveen Sharma
	Dashboard	USN-2	As a user, I can check if there are any fines charged on me.	2	Medium	Anupama PH, Naveen Kumar Sai T, Ragini Kumari, Praveen Sharma
	Admin	USN-3	As an admin, I can login to the website using my credentials	3	High	Anupama PH, Naveen Kumar Sai T, Ragini Kumari, Praveen Sharma
	Admin	USN-4	As an admin, I can access the data regarding any traffic violations and I can charge fines.	3	High	Anupama PH, Naveen Kumar Sai T, Ragini Kumari, Praveen Sharma

<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-3	API Integration	USN-1	Integrate the necessary API's.	3	High	Anupama PH, Naveen Kumar Sai T, Ragini Kumari, Praveen Sharma
	Data Collection	USN-2	Collect data for image processing	2	Medium	Anupama PH, Naveen Kumar Sai T, Ragini Kumari, Praveen Sharma
	API Data	USN-3	Check data from weather and map API.	2	Medium	Anupama PH, Naveen Kumar Sai T, Ragini Kumari, Praveen Sharma
	Hardware Integration	USN-4	Integrate NodeMCU, Display, Speed Cam with Raspberry Pi.	3	High	Anupama PH, Naveen Kumar Sai T, Ragini Kumari, Praveen Sharma

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Sprint-4	Code for Raspberry Pi	USN-1	Develop code to implement API data in Raspberry Pi	3	High	Anupama PH, Naveen Kumar Sai T, Ragini Kumari, Praveen Sharma
	Code for NodeMCU	USN-2	Develop code to display data in the display screen.	3	High	Anupama PH, Naveen Kumar Sai T, Ragini

						Kumari, Praveen Sharma
	Image Processing	USN-3	Develop code to process the image taken from camera	3	High	Anupama PH, Naveen Kumar Sai T, Ragini Kumari, Praveen Sharma
	Display and cloud	USN-4	Deploy the data to the display screen and upload it to the cloud and website	1	Low	Anupama PH, Naveen Kumar Sai T, Ragini Kumari, Praveen Sharma

**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	10	6 Days	24 Oct 2022	29 Oct 2022	10	29 Oct 2022
Sprint-2	10	6 Days	31 Oct 2022	05 Nov 2022	10	05 Nov 2022
Sprint-3	10	6 Days	07 Nov 2022	12 Nov 2022	10	12 Nov 2022
Sprint-4	10	6 Days	14 Nov 2022	19 Nov 2022	10	19 Nov 2022

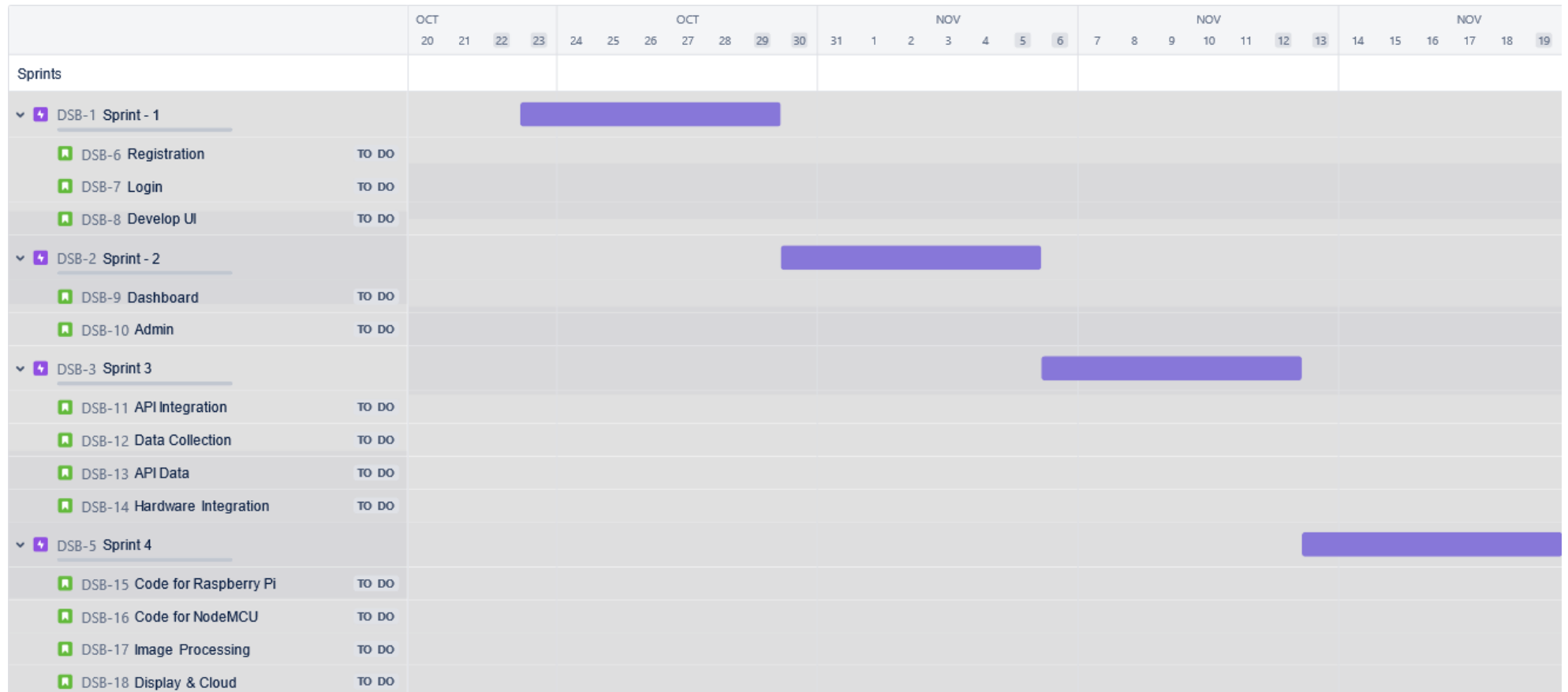
**Velocity:**

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)

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

**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.



<https://www.visual-paradigm.com/scrum/scrum-burndown-chart/>

<https://www.atlassian.com/agile/tutorials/burndown-charts>

Reference:

<https://www.atlassian.com/agile/project-management>

<https://www.atlassian.com/agile/tutorials/how-to-do-scrum-with-jira-software>

<https://www.atlassian.com/agile/tutorials/epics>

<https://www.atlassian.com/agile/tutorials/sprints>

<https://www.atlassian.com/agile/project-management/estimation>

<https://www.atlassian.com/agile/tutorials/burndown-charts>