Project Planning Phase

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

Date	22 October 2022
Team ID	PNT2022TMID17665
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	User Registration	USN-1	As a user, I can register on the website by entering my email, password, and confirming my password.	3	High	Ram Balaji S
	Admin Registration	USN-2	As an admin, I can login to the website using my credentials and access the data.	3	High	Santhosh S
	Login	USN-3	User and Admin can log into the website by entering email & password.	1	Low	Thameemum Ansari A
	Dashboard	USN-4	Develop a dashboard for the website for knowledge about road rules	3	High	Mohamed Thariq P

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-2	Node-Red UI	USN-1	Develop a Node-Red UI Flow.	2	Medium	Ram Balaji S
	Node-Red Dashboard	USN-2	Develop a Node-Red UI Dashboard.	2	Medium	Thameemum Ansari A
	Node-Red Webpage	USN-3	Develop a Node-Red Webpage for displaying the data.	3	High	Mohamed Thariq P
	Node-Red Data Check	USN-4	Check the data displayed on the Node-Red Dashboard UI.	3	High	Santhosh S

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-3	API Integration	USN-1	Integrate the necessary API's.	3	High	Mohamed Thariq P
	Develop Python Code	USN-2	Develop Python code to integrate the necessary APIs.	2	Medium	Ram Balaji S
	API Data	USN-3	Check the data from weather API.	2	Medium	Santhosh S
	Hardware Integration	USN-4	Integrate Arduino with TFT Display via simulation.	3	High	Thameemum Ansari A

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-4	Node-Red Webpage Data	USN-1	Develop code to display data on the webpage and check the necessary.	2	High	Santhosh S
	Node-Red and Watson	USN-2	Connect Node-Red with IBM Watson platform for data processing (Random Data Generation).	3	High	Mohamed Thariq P
	Code for Arduino	USN-2	Develop code to display data in the display screen.	3	High	Thameemum Ansari A
	Final Check	USN-4	Checking all the simulation and services working perfectly and display data and final submission of project.	2	Low	Ram Balaji 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	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)

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

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