

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

Date	06 November 2022
Team ID	PNT2022TMID42278
Project Name	Hazardous Area Monitoring for Industrial Plant powered by IoT
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	User Installation	USN-1	As a user, I must install the smart beacons at points to ensure the entire area of the plant is covered.	3	High	Sowmiya, Chandhni
Sprint-1	Data Gathering	USN- 2	As a user, I can monitor the beacons obtain the temperature of their respective area using sensors.	5	Medium	Surenthiran, Sivahari
Sprint-2	Data Sync	USN- 3	The beacons send their data to the cloud in the real time which is in turn sent to nearby wearable devices and the administrator's dashboard.	1	Medium	Sowmiya,Surenthiran
Sprint-1	User Registration	USN- 1	As a user, I can register for the application by entering my email, password and confirming my password.	2	High	Sivahari, Chandhni, Surenthiran, Sowmiya
Sprint-3		USN-2	As a User, I can login to the application by entering email & password.	3	High	Surenthiran, Sivahari

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1	User Confirmation	USN- 1	As a User, I will receive confirmation email once I have registered for the application.	8	Medium	Sivahari, Surenthiran, Sowmiya, Chandhni
Sprint-2		USN-2	As a User, I will receive OTP once I have registered for the application.	13	Medium	Sivahari, Sowmiya, Surenthiran, Chandhni
Sprint-3	User Dashboard	USN-1	As a User, I can access the dashboard through the application and make use of available resources.	5	High	Sowmiya, Chandhni
Sprint-3		USN-2	As a User, I can monitor the temperature and humidity.	8	Medium	Chandhni, Sowmiya
Sprint-3	SMS Notification	USN-1	As a User, I can receive message in the form of visual notification.	1	High	Chandhni, Sivahari
Sprint-3	Alerting through Message	USN-2	As a User, I can get the alert message if the area has any hazards.	2	High	Chandhni, Sowmiya
Sprint-4	Maintenance	USN-1	As an executive, I manage a team of representatives offering customer support.	1	Low	Surenthiran, Sowmiya, Chandhni, Sivahari
Sprint-4	Admin Dashboard	USN-1	AS an Admin, I can receive information about the situation and can alert the concerned authorities.	2	Medium	Surenthiran, Sivahari
Sprint-4		USN-2	As an Admin, I must allot particular person to look after the atmospheric changes.	8	High	Sivahari, Surenthiran
Sprint-4		USN-3	As an Administrator, I can customize the dashboard to suit their personal requirements and priorities.	5	Medium	Sowmiya, Surenthiran, Chandhni, Sivahari

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.

	OCT	NOV				DEC	
Sprints		HAM...	HAM...	HAM...	HAM...		
> ⚡ HAM-15 Installation							
> ⚡ HAM-16 Registration							
> ⚡ HAM-17 SMS Notification							
> ⚡ HAM-18 Maintenance							