

## Project Planning Phase

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

Project Name	Hazardous Area Monitoring for Industrial Plant Powered by IoT
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	Installation of Beacons	USN-1	First the Admin will be installing smart beacons at necessary places.	15	High	M.Kesavamoorthi V.Kaviya G.Karuppasamy R.Kiruthika
Sprint-1	Providing Wearables	USN-1	The Admin will be providing everyone at the Industry a wearable device.	5	Medium	M.Kesavamoorthi V.Kaviya G.Karuppasamy R.Kiruthika
Sprint-2	Cloud Setup	USN-2	The smart Beacons will connect with the cloud services. Where we can get the realtime data from the wearable	20	High	M.Kesavamoorthi V.Kaviya G.Karuppasamy R.Kiruthika
Sprint-3	Online Monitoring via Web	USN-3	Websites will be created and connected with the cloud services.	20	High	M.Kesavamoorthi V.Kaviya G.Karuppasamy R.Kiruthika
Sprint-4	Monitoring via Mobile	USN-4	Mobile Application will be created and fast sms will be used to alert abnormality to the user.	20	High	M.Kesavamoorthi V.Kaviya G.Karuppasamy R.Kiruthika

**Project Tracker, Velocity & Burndown Chart: (4 Marks)**

<b>Sprint</b>	<b>Total Story Points</b>	<b>Duration</b>	<b>Sprint Start Date</b>	<b>Sprint End Date (Planned)</b>	<b>Story Points Completed (as on Planned End Date)</b>	<b>Sprint Release Date (Actual)</b>
Sprint-1	20	6 Days	24 Oct 2022	29 Oct 2022		29 Oct 2022
Sprint-2	20	6 Days	31 Oct 2022	05 Nov 2022		05 Nov 2022
Sprint-3	20	6 Days	07 Nov 2022	12 Nov 2022		12 Nov 2022
Sprint-4	20	6 Days	14 Nov 2022	19 Nov 2022		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)

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