

## Project Planning Phase

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

Date	18 October 2022
Team ID	PNT2022TMID27938
Project Name	Project - 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(External)	USN-1	The technician should install the smart beacon devices at vital points to increase the data sensing range	20	High	Mohammed Bazith Ravi Rahul Sendhan Amudhan A Vignesh
Sprint-2	Cloud Setup (Cloud Sevices)	USN-2	The smart beacons are connect with IBM cloud services for real-time data transfer	20	High	Mohammed Bazith Ravi Rahul Sendhan Amudhan A Vignesh
Sprint-3	Admin Dasboard Setup/ Web UI (Cloud Services)	USN-3	The web UI is developed and deployed for connecting the user to the cloud	20	High	Mohammed Bazith Ravi Rahul Sendhan Amudhan A Vignesh
Sprint-4	Mobile and wearable device setup (Users)	USN-4	Mobile applications are created using fast SMS API to send alert SMS message and also the watch display mechanism is developed	15	High	Mohammed Bazith Ravi Rahul Sendhan Amudhan A Vignesh

**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		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)

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

**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.

<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>