

## Project Planning Phase

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

Date	11 NOVEMBER 2022
Team ID	PNT2022TMID48690
Project Name	Hazardous Area Monitoring for Industrial Plant powered by IoT

#### Product Backlog, Sprint Schedule, and Estimation

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1	Creation	USN-1	Creating a code for connecting sensor and Arduino.	4	High	Ram vignhesh
Sprint-1	Simulation	USN-2	Simulating the code.	4	Medium	Ram vignhesh
Sprint-2	Device Creation	USN-3	Device creation using IOT Watson platform with credentials	4	High	Dhinesh
Sprint-2	Device performance	USN-4	Required performance of device using local node red platform.	4	Medium	Dhinesh
Sprint-3	Python code	USN-5	Python code for the temperature alert and humidity check.	4	Medium	Divesh
Sprint-3	User interface	USN-6	Creation of web UI (user interface) connected to the software.	4	High	Divesh
Sprint-4	Monitoring	USN-7	Design an application for the project using MIT app inventor.	4	Low	Naga vishwa
Sprint-4	Testing	USN-8	Test the application with required MIT AI2 Companion code.	4	High.	Naga vishwa

**Project Tracker, Velocity & Burndown Chart:**

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	12 NOVEMBER 2022	17 NOVEMBER 2022	20	17 NOVEMBER 2022
Sprint-2	20	6 Days	12 NOVEMBER 2022	17 NOVEMBER 2022	20	17 NOVEMBER 2022
Sprint-3	20	6 Days	12 NOVEMBER 2022	17 NOVEMBER 2022	20	17 NOVEMBER 2022
Sprint-4	20	6 Days	12 NOVEMBER 2022	17 NOVEMBER 2022	20	17 NOVEMBER 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.

