

## Project Planning Phase

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

Date	18 October 2022
Team ID	PNT2022TMID15126
Project Name	Project – Smart Waste Management System for Metropolitan Cities
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	IoT device	USN-1	Creating an IoT device in IBM IoT Watson platform	2	High	Vijay, Sasikumar
Sprint-1	Simulation	USN-2	Simulating and testing it using Test Board	1	Low	Vijay, Sasikumar
Sprint-2	Interfacing	USN-1	Interfacing IBM Watson and Python IDLE	2	High	Sakthivel, Haneef
Sprint-3	Node-RED	USN-1	Creating Node-RED service and interfacing the IoT device	2	High	Haneef, Sasikumar
Sprint-4	Dashboard	USN-1	Monitoring the Dashboard	1	Medium	Vijay, Sakthivel

**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	18	06 Nov 2022
Sprint-3	20	6 Days	07 Nov 2022	12 Nov 2022	15	14 Nov 2022
Sprint-4	20	6 Days	14 Nov 2022	19 Nov 2022	18	20 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.

