

## Project Planning Phase

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

Date	29 October 2022
Team ID	PNT2022TMID20530
Project Name	Project - Smart waste management system for metropolitan cities
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	Software	USN-1	Design the circuit which is to be integrated within the garbage bin using sensors.	10	High	Vaishnavi H Anju Jessica Paul keins Selva Murugan
Sprint-1	Cloud	USN-2	A Cloud web server is created which connects the bin and the authority who is responsible for the disposal of waste from its bin	10	High	Vaishnavi H Anju Jessica Paul keins Selva Murugan
Sprint-2	Technology	USN-3	Connect cloud server and bins.	5	High	Vaishnavi H Anju Jessica Paul keins Selva Murugan

Sprint-2	Cloud Server	USN-4	Upload the details of the truck driver and locate the bin using GPS	5	Medium	Vaishnavi H Anju Jessica Paul keins Selva Murugan
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Sprint-2	Sensor	USN-5	Detect the level of garbage using sensors and store it in the server for specific intervals of time.	10	High	Vaishnavi H Anju Jessica Paul keins Selva Murugan
Sprint-3	Python, GPS	USN-6	Write the python code for intimating to the authority about alerting message messages collection of garbage and where to collect	10	High	Vaishnavi H Anju Jessica Paul keins Selva Murugan
Sprint-3	Cloud	USN-7	Authority should allocate which truck driver should collect the waste at particular aa rea	10	Medium	Vaishnavi H Anju Jessica Paul keins Selva Murugan
Sprint-4	Communicating Medium	USN-8	The truck driver rThe trucks the message from the authority and goes to collect the garbage	10	Medium	Vaishnavi H Anju Jessica Paul keins Selva Murugan

Sprint-4	Communicating Medium	USN-9	After collecting the garbage, the truck driver intimates that the garbage has been collected.	10	Low	Vaishnavi H Anju Jessica Paul keins Selva Murugan
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#### 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 burndown 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.