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

Date	03 October 2022
Team ID	PNT2022TMID37209
Project Name	Project - Smart Waste Management System for Metropolitan Cities using 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	Code for Register and login credentials	USN-1	As a user, I can register in the application and get the login credentials to log onto different devices.	18	High	Akash K
Sprint 2	Python code for Node-Red Connection	USN-2	Python code has to be developed to connect the application with Node-Red serivces to get connections.	18	Low	Jeyavarshan J

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint 3	Node-Red Connection to the IBM Cloudant DB	USN-3	After successful connection of Python code with Node-Red serivces. Connect Node-Red to Cloudant Database.	18	High	Kirubakaran V V
Sprint 4	Web UI Design and Deploy	USN-4	Development of user interface design and Finally Deploy the application.	18		Purushothaman D V

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	18	29 Oct 2022
Sprint-2	20	6 Days	31 Oct 2022	05 Nov 2022	18	05 Nov 2022
Sprint-3	20	6 Days	07 Nov 2022	12 Nov 2022	18	12 Nov 2022
Sprint-4	20	6 Days	14 Nov 2022	19 Nov 2022	18	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)

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

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.

Smart Waste Management System for Metropolitan Cities using IOT

Reference: https://www.academia.edu/32350284/GARBAGE_MANAGEMENT_OF_SMART_CITY_USIN**G_IOT**