Project Planning Phase

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

Date	29 October 2022
Team ID	PNT2022TMID27888
Project Name	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	Circuit Design	USN-1	To design a circuit in Thinkercad or Wokwi using Arduino/ESP32 board and sensors.	5	High	S.Gowtham, M.Loganath B T Dhanush T.Harshitha
Sprint-1	Code	USN-2	To develop a python code to show the location (latitude and longitude) along with the bin values.	7	High	B T Dhanush M.loganath
Sprint-1	Code	Child issue N-3	To develop a python code to Show and mark the bin location in Map	3	Low	M.Loganath
Sprint-1	Code	Child issue N-4	To develop the python code to print the bin location(latitude and longitude)	3	High	M.Loganath
Sprint-1	Code	Child issue N-5	To develop a code to generate a random bin status values.	2	Medium	S.Gowtham
Sprint-2	Device Creation	USN-6	To create a device in the IoT Watson Cloud platform and cloudant database.	2	High	S.Gowtham

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-2	Data Publish	USN-7	Publish the data such as location (Latitude and longitude) and bin status values in IoT Watson Cloud platform.	2	High	S.Gowtham
Sprint-2	Data Publish	USN-8	Store the user data such as user name, password and Gmail in the Cloudant database.	3	Medium	S.Gowtham
Sprint-2	Web UI	USN-9	To create the process workflow for IoT situations using local Node-red Application.	5	High	B T Dhanush
Sprint-3	Registration	USN-10	As a user, I can register for the application by entering my email and password.	2	Medium	T.Harshitha
Sprint-3	Login	USN-11	As a user, I can log into the application through Gmail.	3	High	T.Harshitha
Sprint-3	Dashboard	USN-12	As a user, I can able to interact with the dashboard	5	Low	T.Harshitha
Sprint-4	Web UI	USN-13	Create a dashboard using Node-red application	7	High	B T Dhanush
Sprint-4	Web UI	USN-14	To make the user interact with the web based dashboard software	5	High	B T Dhanush

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	7 Days	31 Oct 2022	06 Nov 2022	20	06 Nov 2022
Sprint-3	20	7 Days	07 Nov 2022	13 Nov 2022	20	13 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)

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

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.

Jira software Link:

https://pt27888.atlassian.net/jira/software/projects/SMAR/boards/3/reports/burndown

https://pt27888.atlassian.net/jira/software/projects/SMAR/boards/3/roadmap