Project Planning Phase

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

Date	23 October 2022
Team ID	PNT2022TMID53567
Project Name	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	Objective	USN-1	The smart bin system will alert the nearby garbage collectors when the bin overflows.	6	High	Gayathri B Deepika K P Haripriya S Hithaishi U M
Sprint-1	Registration	USN-2	The user(garbage collectors) can register for the application using the respective credentials provided to them.	4	Medium	Gayathri B Deepika K P Haripriya S Hithaishi U M
Sprint-1	Designing	USN-3	Designing a circuit with sensors and arduino interface	6	High	Gayathri B Deepika K P Haripriya S Hithaishi U M
Sprint-1	Cloud	USN-4	As an administrator, register in IBM cloud	4	Medium	Gayathri B Deepika K P Haripriya S Hithaishi U M
Sprint-2	Code development	USN-5	Develop a code to send a message when the bin overflows using ultrasonic sensor	10	High	Gayathri B Deepika K P Haripriya S Hithaishi U M

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-2	Cloud Server	USN-6	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	Gayathri B Deepika K P Haripriya S Hithaishi U M
Sprint-3	Sensor	USN-7	Detect the level of garbage using sensor and store it in the server for specific interval of time.	10	High	Gayathri B Deepika K P Haripriya S Hithaishi U M
Sprint-3	Cloud	USN-8	Authority should allocate which garbage collector should collect the waste at particular area	10	High	Gayathri B Deepika K P Haripriya S Hithaishi U M
Sprint-4	Communicating Medium	USN - 9	Garbage collector receives the message from the authority and goes to collect the garbage	10	High	Gayathri B Deepika K P Haripriya S Hithaishi U M
Sprint-4	Communicating Medium	USN-10	Once the garbage is collected the particular person should intimate the completion of the task	5	Medium	Gayathri B Deepika K P Haripriya S Hithaishi U M
Sprint -4	Cloud database	USN-11	Update the database after task completion	5	Medium	Gayathri B Deepika K P Haripriya S Hithaishi U M

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	30 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)

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

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.

https://www.visual-paradigm.com/scrum/scrum-burndown-chart/
https://www.atlassian.com/agile/tutorials/burndown-charts

Reference:
https://www.atlassian.com/agile/project-management
https://www.atlassian.com/agile/tutorials/how-to-do-scrum-with-jira-software
https://www.atlassian.com/agile/tutorials/epics
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https://www.atlassian.com/agile/project-management/estimation
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