

Project Planning Phase

Date	21 October 2022
Team ID	PNT2022TMID38320
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		US-1	Develop the IBM Cloud services required for this project.	6	High	Chandru K Bala Amutha D Jagadeeswaran K Rubashree A
Sprint-1		US-2	The IBM Cloud services necessary for this project should be developed.	4	Medium	Chandru K Bala Amutha D Jagadeeswaran K Rubashree A
Sprint-1		US-3	The creation of the IBM Watson IoT platform serves as the intermediary between web applications and IoT devices.	5	Medium	Chandru K Bala Amutha D Jagadeeswaran K Rubashree A
Sprint-1		US-4	Create a device in the IBM Watson IoT platform and obtain the device credentials to connect the IoT device to the IBM cloud.	5	High	Chandru K Bala Amutha D Jagadeeswaran K Rubashree A

Sprint-2		US-1	Set up the connection security and generate the API keys needed by the Node-RED service to connect to the IBM IoT Platform.	10	High	Chandru K Bala Amutha D Jagadeeswaran K Rubashree A
Sprint-2		US-2	Establish a Node-RED service.	10	High	Chandru K Bala Amutha D Jagadeeswaran K Rubashree A
Sprint-3		US-1	Create a Python script to publish arbitrary sensor data to the IBM IoT platform, including Load cell, IR sensor, and GSM/GPS data.	7	High	Chandru K Bala Amutha D Jagadeeswaran K Rubashree A
Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-3		US-2	Following the development of Python code, commands simply output the statements that describe device control.	5	Medium	Chandru K Bala Amutha D Jagadeeswaran K Rubashree A
Sprint-3		US-3	Send information to the IBM Cloud	8	High	Chandru K Bala Amutha D Jagadeeswaran K Rubashree A
Sprint-4		US-1	In Node-Red, create a web user interface.	10	High	Chandru K Bala Amutha D Jagadeeswaran K Rubashree A
Sprint-4		US-2	Set up the Cloudant DB nodes to store the incoming sensor data in the Cloudant DB and the Node-RED flow to receive data from the IBM IoT platform.	10	High	Chandru K Bala Amutha D Jagadeeswaran K Rubashree A

Project Tracker, Velocity & Burn down Chart: (4 Marks)

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)

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

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