# **Project Planning Phase**

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

| Date          | 18 October 2022                   |
|---------------|-----------------------------------|
| Team ID       | PNT2022TMID37162                  |
| 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<br>Requirement (Epic)              | User Story<br>Number | User Story / Task   | Story Points | Priority | Team Members                                       |
|----------|---|----------------------|---|--------------|----------|--|
| Sprint-1 | Registration                                  | USN-1                | As a user, I can register for the application by entering my email, password, and confirming my password. | 3            | High     | Sriram. B<br>Sivaraj . V<br>Ram Kumar.D<br>Rohit.C |
| Sprint-1 | Check Registration page                       | USN-2                | Check the registration page with both correct and wrong credentials to check its correctness.             | 1            | Low      | Sriram. B<br>Sivaraj . V<br>Ram Kumar.D<br>Rohit.C |
| Sprint-1 | Assign log in details to workers of that area | USN-3                | As a administrator of a area All workers are given proper credentials to log in to the application        | 2            | Medium   | Sriram. B<br>Sivaraj . V<br>Ram Kumar.D<br>Rohit.C |
| Sprint-1 | Send data from sensor(random input) to cloud  | USN-4                | Send data to cloud  | 3            | High     | Sriram. B<br>Sivaraj . V<br>Ram Kumar.D<br>Rohit.C |
| Sprint-1 | Receive user complaints and details           | USN-5                | Whenever the user makes a complaint it is viewed to admin and he takes necessary actions                  | 2            | Medium   | Sriram. B<br>Sivaraj . V<br>Ram Kumar.D<br>Rohit.C |

| Sprint   | Functional Requirement (Epic)                   | User Story<br>Number | User Story / Task   | Story Points | Priority | Team Members                                       |
|----------|---|----------------------|---|--------------|----------|--|
| Sprint-2 | Truck driver application log in                 | USN-6                | Log in to the application created for truck driver  | 3            | High     | Sriram. B<br>Sivaraj . V<br>Ram Kumar.D<br>Rohit.C |
| Sprint-2 | View bin data through cloud to application      | USN-7                | View bin data that is being uploaded to cloud to truck driver application                           | 3            | High     | Sriram. B<br>Sivaraj . V<br>Ram Kumar.D<br>Rohit.C |
| Sprint-2 | Test the truck driver application               | USN-8                | Test the application created for truck driver in all possibilities                                  | 1            | Low      | Sriram. B<br>Sivaraj . V<br>Ram Kumar.D<br>Rohit.C |
| Sprint-3 | Create user application                         | USN-9                | Create a user application for making a complaint on waste overflow                                  | 2            | Medium   | Sriram. B<br>Sivaraj . V<br>Ram Kumar.D<br>Rohit.C |
| Sprint-3 | Test the user application                       | USN-10               | Make sure the created application works as per the planning   | 1            | Low      | Sriram. B<br>Sivaraj . V<br>Ram Kumar.D<br>Rohit.C |
| Sprint-4 | Look after the overall flow of the applications | USN-11               | Look down to all aspects of the applications and check whether it works as per the design and flow. | 3            | High     | Sriram. B<br>Sivaraj . V<br>Ram Kumar.D<br>Rohit.C |

### **Project Tracker, Velocity & Burndown Chart: (4 Marks)**

| Sprint   | Total Story<br>Points | Duration | Sprint Start Date | Sprint End Date<br>(Planned) | Story Points Completed (as on Planned End Date) | Sprint Release Date (Actual) |
|----------|-----------------------|----------|-------------------|------------------------------|---|------------------------------|
| Sprint-1 | 11                    | 6 Days   | 24 Oct 2022       | 29 Oct 2022                  | 8   | 29 Oct 2022                  |
| Sprint-2 | 7                     | 6 Days   | 31 Oct 2022       | 05 Nov 2022                  | 5   | 05 Nov 2022                  |
| Sprint-3 | 3                     | 6 Days   | 07 Nov 2022       | 12 Nov 2022                  | In progress                                     |                              |
| Sprint-4 | 3                     | 6 Days   | 14 Nov 2022       | 19 Nov 2022                  | In progress                                     |                              |

### **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.

https://www.visual-paradigm.com/scrum/scrum-burndown-chart/

https://www.atlassian.com/agile/tutorials/burndown-charts