

## Project Planning Phase

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

|               |                               |
|---------------|-------------------------------|
| Team ID       | PNT2022TMID01720              |
| Project Name  | Smart waste management system |
| 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 | Login                         | USN-1             | As a Administrator, I need to give user id and passcode for ever workers over there in municipality                                                                         | 10           | High     | Gogul        |
| Sprint-1 | Login                         | USN-2             | As a Co-Admin, I'll control the waste level by monitoring them vai real time web portal. Once the filling happens, I'll notify trash truck with location of bin with bin ID | 10           | High     | Sathish      |
| Sprint-2 | Dashboard                     | USN-3             | As a Truck Driver, I'll follow Co-Admin's Instruction to reach the filling bin in short roots and save time                                                                 | 20           | Low      | Shree Vikash |
| Sprint-3 | Dashboard                     | USN-4             | As a Local Garbage Collector, I'll gather all the waste from the garbage, load it onto a garbage truck, and deliver it to Landfills                                         | 20           | Medium   | Sreejith     |
| Sprint-4 | Dashboard                     | USN-5             | As a Municipality officer, I'll make sure everything is proceeding as planned and without any problems                                                                      | 20           | High     | Naveen       |

**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                 | 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)

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