# **Project Planning Phase**

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

| Date          | 14 November 2022                             |
|---------------|--|
| Team ID       | PNT2022TMID35057                             |
| Project Name  | Real-Time River Water Quality Monitoring and |
|               | Control 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<br>Requirement (Epic) | User Story<br>Number | User Story / Task   | Story Points | Priority | Team<br>Members   |
|----------|----------------------------------|----------------------|---|--------------|----------|---|
| Sprint-1 | Registration                     | USN-1                | As a user, I can register for the application by entering my email, password, and confirming my password. | 2            | High     | Aswinth J, Anto Shawn Roche A, Kabin Bose Y, John Nikkith J |
| Sprint-1 |                                  | USN-2                | As a user, I will receive confirmation email once I have registered for the application                   | 1            | High     | Aswinth J, Anto Shawn Roche A, Kabin Bose Y, John Nikkith J |
| Sprint-2 |                                  | USN-3                | As a user, I can register for the application through Facebook  | 2            | Low      | Aswinth J, Anto Shawn Roche A, Kabin Bose Y, John Nikkith J |
| Sprint-1 |                                  | USN-4                | As a user, I can register for the application through Gmail   | 2            | Medium   | Aswinth J,  |

|          |       |       |  |   |      | Anto Shawn<br>Roche A,<br>Kabin Bose<br>Y,<br>John Nikkith<br>J |
|----------|-------|-------|--|---|------|---|
| Sprint-1 | Login | USN-5 | As a user, I can log into the application by entering email & password | 1 | High | Aswinth J, Anto Shawn Roche A, Kabin Bose Y, John Nikkith J     |

### **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 | 20                    | 6 Days   | 24 Oct 2022       | 29 Oct 2022                  | 20  | 29 Oct 2022                  |
| Sprint-2 | 20                    | 6 Days   | 31 Oct 2022       | 05 Nov 2022                  | 30  | 30 Oct 2022                  |
| Sprint-3 | 20                    | 6 Days   | 07 Nov 2022       | 12 Nov 2022                  | 49  | 06 Nov 2022                  |
| Sprint-4 | 20                    | 6 Days   | 14 Nov 2022       | 19 Nov 2022                  | 50  | 07 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:**

