

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

<b>Date</b>	<b>5 November 2022</b>
<b>Team ID</b>	<b>PNT2022TMID11545</b>
<b>Project Name</b>	<b>Real-Time River Water Quality Monitoring and Control System</b>
<b>Maximum Marks</b>	<b>8 Marks</b>

**Project Title : Real-Time River Water Quality Monitoring And Control**

**Team ID: PNT2022TMID11545**

**Team Members:**

- 1. Vishnunathan R - Team Leader**
- 2. Sandosh balaji G - Team Member**
- 3. Sabari kumar G.J - Team Member**
- 4. Chokkar A - Team Member**

### 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	Registration	USN-1	As a user, I can register for the application using google login	2	High	Vishnunathan R, Sabari kumar G.J
Sprint-2		USN-2	As a user, I will receive confirmation email once I have registered for the application	1	High	Chokkar A
Sprint-2	Login Dashboard	USN-3	As a user, I can log into the application by entering email & password	1	High	Chokkar A
Sprint-3			As a developer, I have to integrate python script with the IBM IOT platorm and send values to Node Red	2	High	Vishnunathan R, Sandosh balaji G
Sprint-4			As a developer, I have to make my website to fetch data from the Node Red platform	2	High	Vishnunathan R, Sabari kumar G.J

**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)

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