

Project Planning Phase

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

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| Date | 18 October 2022 |
| Team ID | PNT2022TMID54363 |
| Project Name | Real-time River water quality monitoring and control system |
| 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 | Registration | USN-1 | As a user, I can register for the application by entering my email, password, and confirming my password. | 2 | High | Kumaran S |
| Sprint-1 | | USN-2 | As a user, I will receive confirmation email once I have registered for the application | 1 | High | Karthik Madhan |
| Sprint-2 | | USN-3 | As a user, I can register for the application through Facebook | 2 | Low | Poovarasam M |
| Sprint-1 | | USN-4 | As a user, I can register for the application through Gmail | 2 | Medium | Meiyarasu V |
| Sprint-1 | Login | USN-5 | As a user, I can log into the application by entering email & password | 1 | High | Kumaran S |
| Sprint-1 | User Interface | USN-6 | As a user, I should not need any pre requisites to handle the UI | 1 | Medium | Karthik Madhan |
| Sprint-1 | Dashboard | WUSN-1 | As a web user, able to access the inputs from the sensors | 2 | High | Poovarasam M |
| Sprint-1 | View Manner | CCE-1 | As a customer care, Data visualization must be in good understandable view. | 2 | High | Meiyarasu V |
| Sprint-1 | Taste | CCE-2 | As a customer care, I can able to view the composition of water (e.g. Minerals, etc.) | 1 | High | Kumaran S |
| Sprint-1 | Colour Visibility | CCE-3 | As a customer care, I should know the water colour | 1 | High | Karthik Madhan |
| Sprint-2 | Risk Tolerant | ADMIN-1 | Administrator should handle the system, server and take care of the application. | 1 | High | Kumaran S |

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 | 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)

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

Burndown Chart:

