**Project Planning Phase**

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

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| --- | --- |
| **Date** | **10 NOVEMBER 2022** |
| **Team ID** | **PNT2022TMID19722** |
| **Project Name** | **Real Time River Water Quality**  **Monitoring 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** |
| Sprint1 | Simulation creation | USN-1 | Connect Sensors and Arduino with python code | **2** | High | KAVIN H  ABINESH J  ABISHEK D |
| Sprint2 | Software | USN-2 | Creating device in the IBM Watson IoT platform, workflow for IoT scenarios using Node-Red | **2** | High | GUNASEKARAN P  KAVIN H  ABINESH J |
| Sprint3 | MIT App Inventor | USN-3 | Develop an application for the real time river water quality management project using MIT App Inventor | **2** | High | KAVIN H  ABINESH J |

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| --- | --- | --- | --- | --- | --- | --- |
| Sprint4 | Dashboard | USN-4 | Design the Modules and test the app | **2** | High | KAVIN H  ABINESH J |
| Sprint5 | Web UI | USN-5 | To make the user to interact with software. | **2** | High | GUNASEKARAN P  KAVIN H |

**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 | 6Days | 24 Oct 2022 | 29 Oct 2022 | 20 | 29 Oct 2022 |
| Sprint 2 | 20 | 6Days | 31 Oct 2022 | 05 Nov 2022 |  | 05 Oct 2022 |
| Sprint 3 | 20 | 6Days | 07 Nov 2022 | 12 Nov 2022 |  | 12 Oct 2022 |
| Sprint 4 | 20 | 6Days | 14 Nov 2022 | 19 Nov 2022 |  | 15 Oct 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 = Sprint duration = 20\10 = 2 Velocity