**Project Planning Phase**

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

|  |  |
| --- | --- |
| TEAM ID | PNT2022TMID03606 |
| PROJECT NAME | Project- Real Time River Quality Monitoring and Control System. |

**Product Backlog, Sprint Schedule, and Estimation (4 Marks)**

Use the below template to create product backlog and sprint schedule

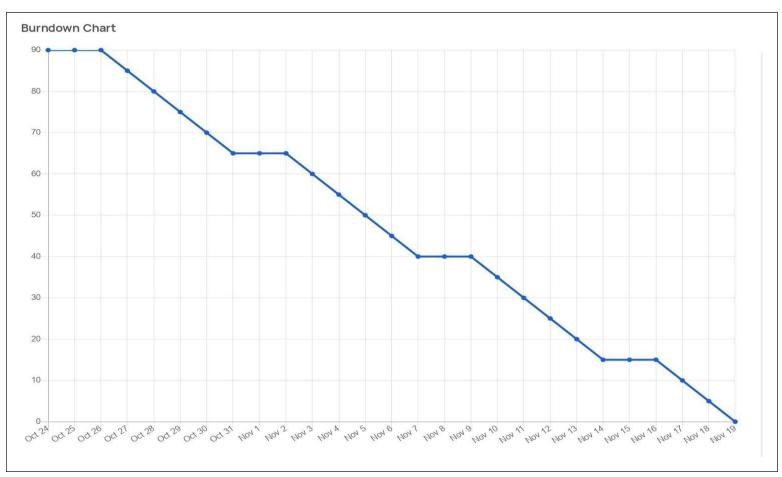
|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Sprint** | **Functional**  **Requirement**  **(Epic)** | **User story**  **Numb err** | **User Story / Task** | **Story Points** | **Priority** | **Team**  **Members** |
| Sprint-1 | Registration | USN-1 | As a user, I canregister for the application by entering my email, password, and confirming My password. | 2 | HIGH | Sri Ram  Jaya Surya  Jithendra  Venkatesh |
| Registration via Facebook | USN-3 | As a user, I can register for the  application through Facebook | 2 | LOW |
| Registration via Mail ID | USN-4 | As a user, I can register for the application through Gmail | 2 | MEDIUM |
| Sprint-2 | Confirmation | USN-2 | As a user, I will receive confirmation email once I have registered for the application | 1 | HIGH | Sri Ram  Jaya Surya |
| Login | USN-5 | As a user, I can log into the  application by entering email & password | 1 | HIGH |
|  | IBM Cloud service  Access | Get access to IBM cloud services. | 2 | HIGH |
| Sprint-3 | Create the IBM Watson IoT and device Settings | USN-6 | To create the IBM Watson IoT Platform and integrate the microcontroller with it, to send the sensed data on  Cloud | 2 | HIGH | Jithendra  Venkatesh  Jaya Surya |
| Create a node red service | USN-7 | To create a node red service to | 2 | MEDIUM |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **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 | 4 Days | 24 Oct 2022 | 27 Oct 2022 | 20 | 29 Oct 2022 |
| Sprint-2 | 20 | 5 Days | 28 Oct 2022 | 01 Nov 2022 | 20 | 04 Nov 2022 |
| Sprint-3 | 20 | 8 Days | 02 Nov 2022 | 09 Nov 2022 | 20 | 11 Nov 2022 |
| Sprint-4 | 20 | 9 Days | 10 Nov 2022 | 18 Nov 2022 | 20 | 19 Nov 2022 |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  |  | integrate the IBM Watson along with the Web UI |  |  | Venkatesh ,Sri Ram  Jaya Surya |
| Create a Web UI | USN-8 | To create a Web UI, to access the data from the cloud and display all parameters. | 2 | MEDIUM |
| To develop a Python code | USN-9 | Create a python code to sense the physical quantity and store data | 2 | MEDIUM |
| Sprint-4 | Publish Data to cloud. | USN-10 | Publish Data that is sensed by the microcontroller to the Cloud | 3 | HIGH | Sri Ram  Jaya Surya  Venkatesh |
| Fast-SMS Service | USN-11 | Use Fast SMS to send alert messages once the parameters like pH, Turbidity and temperature goes beyond the threshold | 3 | HIGH |
| Testing | USN-12 | Testing of project and final deliverables | 3 | MEDIUM |

**Velocity:**

Imagine we have 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)



**Burndown Chart:**

A burn down chart is a graphical representation of work left to do versus time. It is often used in agile software development methodologies such as Scrum. However, burn down charts can be applied to any project containing measurable progress over time.