**Project Planning Phase**

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

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| --- | --- |
| Date | 21 October 2022 |
| Team ID | PNT2022TMID41957 |
| Project Name | Project- Real Time River Quality Monitoring and Control System. |
| Maximum Marks | 8 Marks |

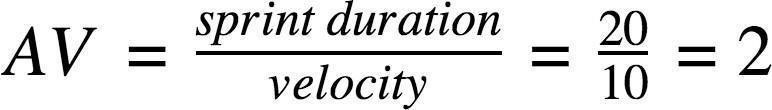
**Product Backlog, Sprint Schedule, and Estimation (4 Marks)**

Use the below template to create product backlog and sprint schedule

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| --- | --- | --- | --- | --- | --- | --- |
| **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 can register for the application by entering my email, password, and confirming My password. | 2 | High | ANUSIYA |
| 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 onceI have registered for the application | 1 | High |
| 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 deviceSettings | USN-6 | To create the IBM Watson IoT Platform and integrate the microcontroller with it, to send the sensed data on Cloud | 2 | High | ANUSIYA,  GOGOL,  DINGESWARI |
| Create a node red service | USN-7 | To create a node red service to integrate the IBM Watson along with the Web UI | 2 | medium | BENINAL,  ANUSIYA,  GOGUL |
| Create a Web UI | USN-8 | To create a Web UI, to access the data from the cloud And display all parameters. | 2 | Medium | GOGUL, |
| To develop a Python code | USN-9 | Create a python code to sense the physical quantity And store data. | 2 | Medium | ANUSIYA |

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| --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  | BENINAL |
| Publish Data to cloud. | USN-10 | Publish Data that is sensed by the microcontroller to the Cloud | 3 | High | DINGESHWARI |
| Sprint-4 | 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 | ANUSIYA,  BENINAL,  GOGUL,  DINGESWARI |
|  | Testing | USN-12 | Testing of project and final deliverables | 3 | Medium |

**Project Tracker, Velocity & Burn down Chart: (4 Marks)**



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| --- | --- | --- | --- | --- | --- | --- |
| **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 |
|  |  |  |  |  |  |  |
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**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 m](https://www.visual-paradigm.com/scrum/what-is-agile-software-development/)ethodologies such as [Scrum. H](https://www.visual-paradigm.com/scrum/scrum-in-3-minutes/)owever, burn down charts can be applied to any project containing measurable progress over time.

