**Project Planning Phase**

**Project Planning Template (Product Backlog, Sprint Planning, Stories, Storypoints)**

|  |  |
| --- | --- |
| Date | 12 November 2022 |
| Team ID | PNT2022TMID53593 |
| Project Name | Project – River-Time River Water Management 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

| **Sprint** | **Functional Requirement (Epic)** | **User Story Number** | **User Story / Task** | **Story Points** | **Priority** | **Team Members** |
| --- | --- | --- | --- | --- | --- | --- |
| Sprint-1 |  | USN-1 | Creating IBM Cloud and using its services. | 6 | High | M. Kalaivanan  S. Jayalakshman  K. Jeeva  S. Kabileshwar |
| Sprint-1 |  | USN-2 | Configure the IBM cloud service and creating IoT platform. | 4 | High | M. Kalaivanan  S. Jayalakshman  K. Jeeva  S. Kabileshwar |
| Sprint-1 |  | USN-3 | IBM Watson IoT platform acts as the mediator to connect the web application to IoT devices, hence Launching IBM Watson IoT platform. | 5 | Low | M. Kalaivanan  S. Jayalakshman  K. Jeeva  S. Kabileshwar |
| Sprint-1 |  | USN-4 | In order to connect the IoT device to the IBM Cloud, create a device in the IBM Watson IoT Platform and get the device credentials | 5 | Medium | M. Kalaivanan  S. Jayalakshman  K. Jeeva  S. Kabileshwar |
| Sprint-2 |  | USN-1 | Configure the connection security and create API keys that are used in the NODE-RED service for accessing the IBM IoT Platform. | 10 | High | M. Kalaivanan  S. Jayalakshman  K. Jeeva  S. Kabileshwar |
| Sprint-2 |  | US-2 | Create a Node -RED service. | 10 | High | M. Kalaivanan  S. Jayalakshman  K. Jeeva  S. Kabileshwar |
| Sprint-3 |  | US-1 | Develop a python script to publish random sensor data such as temperature, turbidity and pH to the IBM IoT Platform. | 7 | High | M. Kalaivanan  S. Jayalakshman  K. Jeeva  S. Kabileshwar |
| Sprint-3 |  | US-2 | After developing python code, commands are received just print the statements which represent the control of the devices. | 5 | Medium | M. Kalaivanan  S. Jayalakshman  K. Jeeva  S. Kabileshwar |
| Sprint-3 |  | US-3 | Publish data to the IBM Cloud. | 8 | High | M. Kalaivanan  S. Jayalakshman  K. Jeeva  S. Kabileshwar |
| Sprint-4 |  | US-1 | Create Web UI in Node -RED. | 10 | High | M. Kalaivanan  S. Jayalakshman  K. Jeeva  S. Kabileshwar |
| Sprint-4 |  | US-2 | Configure the Node -RED flow to receive data from the IBM IoT Platform and also use Cloudant DB nodes to store the received sensor data in Cloudant DB. | 10 | High | M. Kalaivanan  S. Jayalakshman  K. Jeeva  S. Kabileshwar |

**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)



**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 suchas Scrum. However, burn down charts can be applied to any project containing measurable progress over time.

