**Project Planning Phase**

|  |  |
| --- | --- |
| Team ID | PNT2022TMID02477 |
| Project Name | IoT based Smart crop Protection System for agriculture |
| Maximum Marks | 8 Marks |

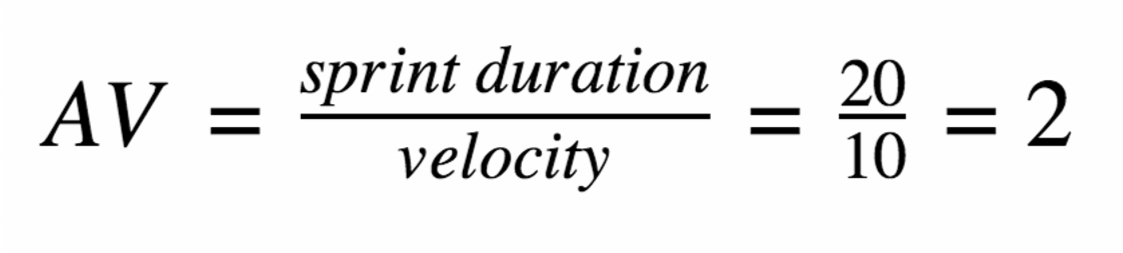
**Product Backlog, Sprint Schedule, and Estimation (4 Marks)**

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 |  | US-1 | Create the IBM Cloud services which are being used in this project. | 6 | High | Hari,janarthanan  karan |
| Sprint-1 |  | US-2 | Configure the IBM Cloud services which are being used in completing this project. | 4 | Medium | Hari,harshad |
| Sprint-2 |  | US-3 | IBM Watson IoT platform acts as the mediator to connect the web application to IoT devices, so create the IBM Watson IoT platform. | 5 | Medium | Hari,karan |
| Sprint-2 |  | US-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 | High | Janarthanan,karan |
| Sprint-3 |  | US-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 | Hari,karan |
| **Sprint** | **Functional**  **Requirement (Epic)** | **User Story**  **Number** | **User Story / Task** | **Story Points** | **Priority** | **Team Members** |
| Sprint-3 |  | US-2 | Create a Node-RED service. | 10 | High | Hari,karan |
| Sprint-3 |  | US-1 | Develop a python script to publish random sensor data such as temperature, moisture, soil and humidity to the IBM IoT platform | 7 | High | Janarthanan,karan |
| Sprint-3 |  | US-2 | After developing python code, commands are received just print the statements which represent the control of the devices. | 5 | Medium | Janarthanan,karan |
| Sprint-4 |  | US-3 | Publish Data to The IBM Cloud | 8 | High | Hari,janarthanan,  harshad,karan |
| Sprint-4 |  | US-1 | Create Web UI in Node- Red | 10 | High | Hari,karan |
| 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 the cloudant DB | 10 | High | Hari,janarthanan  karan |

**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 burndown chart is a graphical representation of work left to do versus time However, burndown charts can be applied to any project containing measurable progress overtime.

