

## Project Planning Phase

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

Date	19 October 2022
Team ID	PNT2022TMID51293
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	Registration	USN-3	Create the IBM cloud services which are being used in this project.	6	High	Jesu sherly Ruba Sajitha Starlin Subisha
Sprint-1		USN-4	Configure the IBM cloud services which are being used in completing this project.	4	Medium	Jesu sherly Ruba Sajitha Starlin Subisha
Sprint-2		USN-1	IBM Watson IoT platform acts as the mediator to connect the web application to IoT devices, so create the IBM Watson IOT platform	5	High	Jesu sherly Ruba Sajitha Starlin Subisha
Sprint-2		USN-2	In order to connect the IOT device to the IBM cloud ,create a device in the IBM Watson IOT platform and get the device credential	5	Medium	Jesu sherly Ruba Sajitha Starlin Subisha
Sprint-3	Login	USN-1	Configure the connection security and create API key that are used in the Node-Red service for accessing the IBM IOT platforms	10	High	Jesu sherly Ruba Sajitha Starlin Subisha

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprints-3	Dashboard	US-2	Create a NODE-RED service	10	High	Jesu sherly Ruba Sajitha Starlin Subisha
Sprints-4		US-1	Create Web UI IN NODE-RED	10	High	Jesu sherly Ruba Sajitha Starlin Subisha
Sprints-4		US-2	Configure the Node-RED flow to receive data from the IBM IO T platforms and also use cloudant DB nodes to store the received sensor data in the cloudant DB	10	High	Jesu sherly Ruba Sajitha Starlin Subisha

#### 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	14 Nov 2022
Sprint-4	20	6 Days	14 Nov 2022	19 Nov 2022	20	21 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)

$$AV = \frac{\textit{sprint duration}}{\textit{velocity}} = \frac{20}{10} = 2$$