**Project Planning Phase**

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

| Date | 18 October 2022 |
| --- | --- |
| Team ID | PNT2022TMID35844 |
| Project Name | Project - 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-1 | As a user, I can register for the application by entering my email, password, and confirming my password. | 5 | High |  |
| USN-2 | As a user, I will receive confirmation email once I have registered for the application | 5 | High |  |
|  |  | USN-3 | As a user, I can register for the application through Gmail | 4 | low |  |
|  | Login | USN-4 | As a user, I can log into the application by entering email & password | 3 | low |  |
|  | Dashboard | USN-5 | The application should be able to display the desired results to the user. | 3 | low |  |
| Sprint-2 | Dashboard  Monitoring field | USN-6 | As a user, I can register for the application through Facebook | 10 | Low |  |
| USN-7 | 24/7 Live monitoring of field/crop conditions for high reliability. | 10 | Medium |  |
| Sprint-3 | Clarifai service for detection and developing python script | USN-8 | As a user , I can track and analyze available data using Dashboard | 10 | High |  |
| USN-9 | I can react instantaneously to the problems being faced. | 10 | Low |  |
| Sprint-4 | Web Application using Node Red Service | USN-10 | As a user I can request developers for help in case of failure of service or unanswered queries/complaints | 10 | Low |  |
| USN-=11 | We must ensure perfect service from our team in order to satisfy the customer needs and neglect errors. | 10 | High |  |

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

[**https://www.visual-paradigm.com/scrum/scrum-burndown-chart/**](https://www.visual-paradigm.com/scrum/scrum-burndown-chart/)

[**https://www.atlassian.com/agile/tutorials/burndown-charts**](https://www.atlassian.com/agile/tutorials/burndown-charts)

**Reference:**

[**https://www.atlassian.com/agile/project-management**](https://www.atlassian.com/agile/project-management)

[**https://www.atlassian.com/agile/tutorials/how-to-do-scrum-with-jira-software**](https://www.atlassian.com/agile/tutorials/how-to-do-scrum-with-jira-software)

[**https://www.atlassian.com/agile/tutorials/epics**](https://www.atlassian.com/agile/tutorials/epics)

[**https://www.atlassian.com/agile/tutorials/sprints**](https://www.atlassian.com/agile/tutorials/sprints)

[**https://www.atlassian.com/agile/project-management/estimation**](https://www.atlassian.com/agile/project-management/estimation)

[**https://www.atlassian.com/agile/tutorials/burndown-charts**](https://www.atlassian.com/agile/tutorials/burndown-charts)