**Project Planning Phase**

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

|  |  |
| --- | --- |
| Date | 18 October 2022 |
| Team ID | PNT2022TMID11540 |
| 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. | 4 | High | T.M. Uma Maheshwaran |
| Sprint-1 | Registration | USN-2 | As a user, I will receive confirmation email once I have registered for the application | 3 | High | K. Pranav Kumar |
| Sprint-1 | Login page | USN-3 | As a user, enter the username and password which is already existing | 3 | Medium | K. Pranav Kumar |
| Sprint-1 | Forecasting the weather | USN-4 | As a user, we can monitor he weather conditions like humidity , temperature etc... | 12 | High | K,K, Prasath |
| Sprint-2 | Sensing moisture condition of the soil | USN-5 | As a user, we can know about soil moisture condition , controlling the motor pump for water flow by using mobile application. | 10 | High | T.M. Uma Maheshwaran |
| Sprint-3 | Detecting the motion in certain range | USN-6 | Fencing system are helpful in providing security against animals and birds. | 12 | High | K.K.Prasath |
| Sprint-4 | Checking the crops conditions. | USN-7 | Here farmer needs to update the condition of crops. | 9 | HIgh | S.Siva ganapathy |

**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 | 8 | 6 Days | 24 Oct 2022 | 29 Oct 2022 | 22 | 29 Oct 2022 |
| Sprint-2 | 1 | 6 Days | 31 Oct 2022 | 05 Nov 2022 | 10 | 05 Nov 2022 |
| Sprint-3 | 2 | 6 Days | 07 Nov 2022 | 12 Nov 2022 | 12 | 12 Nov 2022 |
| Sprint-4 | 1 | 6 Days | 14 Nov 2022 | 19 Nov 2022 | 9 | 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)

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