

## Project Planning Phase

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

Team ID	PNT2022TMID35045
Project Name	Project – IoT Based Smart Crop Protection System for Agriculture

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

Use the below template to create product backlog and sprint schedule

Sprint-1	Registration	USN-1	As a user, I can register for the application by entering my email, password, and confirming my password.	2	High	AARTHIKA.R NAGATHANSI.P KEERTHANA.M JOTHIKA.K
Sprint-1		USN-2	As a user, I will receive confirmation email once I have registered for the application	1	High	AARTHIKA.R NAGATHANSI.P KEERTHANA.M JOTHIKA.K
Sprint-2		USN-3	As a user, I can register for the application through Facebook	2	Low	AARTHIKA.R NAGATHANSI.P KEERTHANA.M JOTHIKA.K
Sprint-1		USN-4	As a user, I can register for the application through Gmail	2	Medium	AARTHIKA.R NAGATHANSI.P KEERTHANA.M JOTHIKA.K

Sprint-1	Login	USN-5	As a user, I can log into the application by entering email & password	1	High	AARTHIKA.R NAGATHANSI.P KEERTHANA.M JOTHIKA.K
Sprint-2	Dashboard	USN-6	The explored and visualized data are displayed in dashboard	2	High	AARTHIKA.R NAGATHANSI.P KEERTHANA.M JOTHIKA.K

#### 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	19	05 Nov 2022
Sprint-3	20	6 Days	07 Nov 2022	12 Nov 2022	18	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)

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

#### 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 such as Scrum. However, burn down charts can be applied to any project containing measurable progress over time.

