

Project Planning Phase

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

Date	18October 2022
Team ID	PNT2022TMID37200
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 and create password and profile	2	High	Suvitha.K
Sprint-1		USN-2	As a user, I will receive confirmation through phone number, I once I have registered for the application	1	High	Princy.S
Sprint-1	Login	USN-3	As a user, I can log into the application by entering email & password	2	High	Deepika.V
Sprint-1	Dashboard	USN-4	As a user, I will able to view the information about my account.	2	High	Abirami.G
Sprint-2	Soil parameters measurement	USN-5	The temperature, moisture, humidity level of the farm is send to the user through application	3	High	Shanthini.M
Sprint-2	Smart Irrigation System	USN-6	The delivering of water in field by the farmer is controlled by application.	5	High	Suvitha.K
Sprint-3	Detection of animals	USN-7	The animals or birds detected near the field using the data given before	5	High	Princy.S

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-4	Smart protection system	USN-8	The protection system will work according to the animal and birds detected	5	High	Shanthini.M

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	7	6 Days	24 Oct 2022	29 Oct 2022	7	14 November 2022
Sprint-2	8	6 Days	31 Oct 2022	05 Nov 2022	8	14 November 2022
Sprint-3	5	6 Days	07 Nov 2022	12 Nov 2022	5	14 November 2022
Sprint-4	5	6 Days	14 Nov 2022	19 Nov 2022	5	19 November 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.

Sprint	Start Hours	Hour Spent Day 1	Hour Spent Day 2	Hour Spent Day 3	Hour Spent Day 4	Hour Spent Day 5	Hour Spent Day 6	Total Hours
Sprint 1	12	3	3	2	2	2	0	12
Sprint 2	12	2	3	3	1	2	1	12
Sprint 3	12	3	2	2	2	2	1	12
Sprint 4	12	5	3	2	1	1	0	12
Actual Remaining Hours	48	35	24	15	9	2	0	48
Estimated Remaining Hours	48	38	30	20	12	5	0	48

