

Project Planning Phase

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

Date	22 October 2022
Team ID	PNT2022TMID30241
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	Proper detection	USN-1	As a user, I want to detect the movement of intruder in the field	5	High	Suvatha A S
		USN-2	As a user, I want to know about the intruder hence the camera is activated	4	High	Suvatha A S
		USN-3	As a user, I want to capture the pictures of the intruder	3	Medium	Suvatha A S
Sprint-2	Buzzer	USN-4	As a user, I should ensure the crop protection from birds using speaker	2	Medium	Suvetha R
		USN-5	As a user, I should protect crop from intruder using buzzer once the pictures are captured	4	High	Suvetha R
Sprint-3	Mobile notification	USN-6	As a user, I will receive the pictures of the intruder through SMS	5	High	Bhavadharani S
		USN-7	As a user, I can monitor the activity through the data stored in the cloud	3	Medium	Bhavadharani S

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-4	Farmer	USN-8	As a user, I will receive the alert message for the identification of intruder	5	High	Darsini B
		USN-9	As a user, I can access the system from remote region through which I can switch off the buzzer when not needed	1	Low	Darsini B
		USN-10	As a user, I can use the system at different region so that the animals won't get used to it	1	Low	Darsini B
		USN-11	As a user, I should ensure the power efficiency using the solar power source	2	Medium	Darsini B

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		
Sprint-2	20	6 Days	31 Oct 2022	05 Nov 2022		
Sprint-3	20	6 Days	07 Nov 2022	12 Nov 2022		
Sprint-4	20	6 Days	14 Nov 2022	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)

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