

Project Planning Phase

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

Date	18 October 2022
Team ID	PNT2022TMID27900
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 through mobile phone, social media.	2	High	Kavitha,Madhumitha, Aparana,Haritha
Sprint-1	Confirmation	USN-2	As a user, I will receive confirmation email once I have registered for the application	1	High	Kavitha,Madhumitha, Aparana,Haritha
Sprint-1	Login	USN-3	As a user, I can log into the application order to monitor the sensors .	4	Low	Kavitha,Madhumitha, Aparana,Haritha
Sprint-2	Dashboard	USN-4	Detects the temperature which is stored in database.	5	Medium	Kavitha,Madhumitha, Aparana,Haritha
Sprint-2	Controlling motor pump	USN-5	It is used to control the pump and sprinklers	4	High	Kavitha,Madhumitha, Aparana,Haritha
Sprint-2	Dashboard	USN-6	Here if an animal is detected buzzer will turn on and notification is sent.	5	High	Kavitha,Madhumitha, Aparana,Haritha
Sprint-3	Collecting the database of crops	USN-7	Here farmer needs to update the data.	3	Low	Kavitha,Madhumitha, Aparana,Haritha
Sprint-3	Usage	USN-8	User can view the webpage and get information.	1	High	Kavitha,Madhumitha, Aparana,Haritha

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-4	Action	USN-9	User can solve the problem when some faces any usage issues.	2	High	Kavitha,Madhumitha, Aparana,Haritha
Sprint-4	Administration	USN-10	Used to store any information	3	High	Kavitha,Madhumitha, Aparana,Haritha

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)

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

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.

