

Project Planning Phase

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

Date	18 October 2022
Team ID	PNT2022TMID35844
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	Create and configure IBM Cloud services	USN-1	As a user, I can control and monitor the IoT device using IBM Watson platform.	5	High	Alben Richards Abishek
		USN-2	As a developer, I can create a web application using Node red	5	High	Harinandini Maheswari
		USN-3	As a developer, I can create a databae to store image URL	5	Low	Alben Richards Maheswari
		USN-4	As a developer, I can create a bucket to store images	5	Low	Abishek Harinandini
Sprint-2	Development of python script	USN-5	As a user, I can track temperature , moisture and humidity values	10	Low	Alben Richards Harinandini
		USN-6	24/7 Live monitoring of field/crop conditions for high reliability.	10	Medium	Abishek Maheswari

Sprint-3	Clarifai service for detection.	USN-7	As a user , I can track the intrusion of any animal into the field	10	High	Alben Richards Abishek
		USN-8	I can react instantaneously to the problems being faced.	10	Low	Harinandini Maheshwari
Sprint-4	Web Application using Node Red Service	USN-9	As a user I can request developers for help in case of failure of service or unanswered queries/complaints	10	Low	Alben Richards Maheswari
		USN -10	We must ensure perfect service from our team in order to satisfy the customer needs and neglect errors.	10	High	Abishek Harinandini

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.

<https://www.visual-paradigm.com/scrum/scrum-burndown-chart/>
<https://www.atlassian.com/agile/tutorials/burndown-charts>

Reference:

<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/epics>
<https://www.atlassian.com/agile/tutorials/sprints>
<https://www.atlassian.com/agile/project-management/estimation>
<https://www.atlassian.com/agile/tutorials/burndown-charts>