

Project Planning Phase

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

Date	21 October 2022
Team ID	PNT2022TMID05114
Project Name	Project – Smart Farmer- IoT based Smart Farming Application
Maximum Marks	8 Marks

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

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1	Simulation creation	USN-1	Connect Sensors and Arduino with python code	2	High	Vimalkanth Yuvan
Sprint-2	Software	USN-2	Creating device in the IBM Watson IoT Platform, workflow for IoT scenarios using Node-Red	2	High	Vimalkanth Sudharsan
Sprint-3	MIT App Inventor	USN-3	Develop an application for the Smart farmer project using MIT App Inventor	2	High	Sudharsan Somnath
Sprint-3	Dashboard	USN-3	Design the Modules and test the app	2	High	Vimalkanth Yuvan Sudharsan
Sprint-4	Web UI	USN-4	To make the user interact with software.	2	High	Yuvan Sudharsan

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		05 Oct 2022
Sprint-3	20	6 Days 07 Nov 2022 12 Nov 2022		12 Oct 2022
Sprint-4	20	6 Days 14 Nov 2022 19 Nov 2022		15 Oct 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 burndown 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>