

Project Planning Phase

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

Date	18 October 2022
Team ID	PNT2022TMID48639
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, password, and confirming my password.	20	High	M.Sathya
Sprint-1	Login	USN-2	As a user, enter the username and password which is already existing.	20	High	M.Sathya
Sprint-2	Forecasting the weather	USN-3	As a user, we can monitor the weather conditions like humidity, temperature etc...	20	High	N.Selvambikai
Sprint-2	Sensing moisture condition of the soil	USN-4	As a user, we can know about soil moisture condition, controlling the motor pump for waterflow.	20	High	S.Divya
Sprint-3	Detecting the motion in certain range	USN-5	Fencing system are helpful in providing security against animals and birds.	20	High	A.Afhran nisha
Sprint-4	Coding	USN-6	To modify the code according to our program and improve the efficiency of that code.	20	High	N.Selvambikai
Sprint-5	Checking the crops conditions.	USN-7	Here farmer needs to update the condition of crops.	20	High	P.Sharumathi

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	11 Nov 2022	19 Nov 2022	20	19 Nov 2022
Sprint-5	20	6 Days	14 Nov 2022	20 Nov 2022	20	20 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)

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

$$AV = \frac{\text{sprint duration}}{\text{velocity}}$$

$$=6/13.25$$

$$=0.45$$

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>

