

Project Planning Phase

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

Date	08 November 2022
Team ID	PNT2022TMID00784
Project Name	PREDICTING THE ENERGY OUTPUT OF WIND TURBINE BASED ON WEATHER CONDITION
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.	5	High	Karthik D Ajith S Joshua D Jayakumar Y
Sprint-1		USN-2	As a user, I will receive confirmation email once I have registered for the application	5	High	Karthik D Ajith S Joshua D Jayakumar Y
Sprint-1		USN-3	User should verify the email once they have created their account.	2	Low	Karthik D Ajith S Joshua D Jayakumar Y
Sprint-1		USN-4	As a user, I can register for the application through Gmail	3	Medium	Karthik D Ajith S Joshua D Jayakumar Y

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1	Login	USN-5	As a user, I can log into the application by entering email & password	5	High	Karthik D Ajith S Joshua D Jayakumar Y
Sprint-2	Dashboard	USN-6	Once I have logged in, I can see my dashboard.	6	Medium	Karthik D Ajith S Joshua D Jayakumar Y
Sprint-2	Web access	USN-7	As a customer I can access the website to predict the turbine power	7	High	Karthik D Ajith S Joshua D Jayakumar Y
Sprint-2	Prediction	USN-8	As a customer when I enter the weather details, the website should predict the approximate turbine power	7	High	Karthik D Ajith S Joshua D Jayakumar Y
Sprint-3		USN-9	Customer can also provide the latitude and longitude of any location, and our web app will predict the wind power based on the wind speed and wind direction of the location given.	10	Medium	Karthik D Ajith S Joshua D Jayakumar Y
Sprint-3	Forecasting	USN-10	Customer can enter latitude and longitude of any location; our website will forecast wind	5	Medium	Karthik D Ajith S Joshua D

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
			speed, wind direction and wind power for next 6 days.			Jayakumar Y
Sprint-3	Plotting	USN-11	Website provides various charts to make the customer understand the speed, direction and power visually.	3	Low	Karthik D Ajith S Joshua D Jayakumar Y
Sprint-3	Security	USN-12	As a customer I expect my data to be secured	2	Low	Karthik D Ajith S Joshua D Jayakumar Y
Sprint-4	Database Access	USN-13	As an Administrator, I should maintain the website. And update the website regularly.	20	High	Karthik D Ajith S Joshua D Jayakumar Y

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	Total Story Points	Duration	Sprint Start Date	Sprint End Date (Planned)	Story Points Completed (as on Planned End Date)	Sprint Release Date (Actual)
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>