

## Project Planning Phase

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

Date	18 October 2022
Team ID	PNT2022TMID13687
Project Name	Predicting the energy output of wind farm based on weather conditions.
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	Bharath kumar.G Dhanu Prasanth.M Mugesh kumar.S Harish kumar
Sprint-1		USN-2	As a user, I will receive confirmation email once I have registered for the application	5	High	Bharath kumar.G Dhanu Prasanth.M Mugesh kumar.S Harish kumar
Sprint-1		USN-3	User should verify the email once they have created their account.	2	Low	Bharath kumar.G Dhanu Prasanth.M Mugesh kumar.S Harish kumar

Sprint-1		USN-4	As a user, I can register for the application through Gmail	3	Medium	Bharath kumar.G Dhanu Prasanth.M Mugesh kumar.S Harish kumar
----------	--	-------	---	---	--------	---

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	Bharath kumar.G Dhanu Prasanth.M Mugesh kumar.S Harish kumar
Sprint-2	Dashboard	USN-6	Once I have logged in, I can see my dashboard.	6	Medium	Bharath kumar.G Dhanu Prasanth.M Mugesh kumar.S Harish kumar
Sprint-2	Web access	USN-7	As a customer I can access the website to predict the turbine power	7	High	Bharath kumar.G Dhanu Prasanth.M Mugesh kumar.S Harish kumar
Sprint-2	Prediction	USN=8	As a customer when I enter the weather details, the website should predict the approximate turbine power	7	High	Bharath kumar.G Dhanu Prasanth.M Mugesh kumar.S Harish kumar

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	Bharath kumar.G Dhanu Prasanth.M Mugesh kumar.S Harish kumar
Sprint-3	Forecasting	USN-10	speed , wind direction and wind power for next 6 days.	5	Medium	Bharath kumar.G Dhanu Prasanth.M Mugesh kumar.S Harish kumar
<b>Sprint</b>	<b>Functional Requirement (Epic)</b>	<b>User Story Number</b>	<b>User Story / Task</b>	<b>Story Points</b>	<b>Priority</b>	<b>Team Members</b>
Sprint-3	Plotting	USN-11	Website provides various charts to make the customer understand the speed, direction and power visually.	3	Low	Bharath kumar.G Dhanu Prasanth.M Mugesh kumar.S Harish kumar
Sprint-3	Security	USN-12	As a customer I expect my data to be secured	2	Low	Bharath kumar.G Dhanu Prasanth.M Mugesh kumar.S Harish kumar
Sprint-4	Database Access	USN-13	As an Administrator, I should maintain the website. And update the website regularly.	20	High	Bharath kumar.G Dhanu Prasanth.M Mugesh kumar.S Harish kumar

**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		29 Oct 2022
Sprint-2	20	6 Days	31 Oct 2022	05 Nov 2022		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		12 Nov 2022
Sprint-4	20	6 Days	14 Nov 2022	19 Nov 2022		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>