

Project Planning Phase Sprint Delivery Planning

Date	26 November 2022
Team ID	PNT2022TMID38491
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)

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1	Building Model-1	USN-1	As a user,I can request for the wind direction, wind speed	5	High	J.Gowdham N.Sivasurya S.Babu S.Sayedhasan
Sprint-1		USN-2	As a user, I can request for the Speed of the Wind	5	High	J.Gowdham N.Sivasurya S.Babu S.Sayedhasan
Sprint-1		USN-3	As a user, I can request for the Direction of the Wind	2	Low	J.Gowdham N.Sivasurya S.Babu S.Sayedhasan
Sprint-2	Building Model-2	USN-4	As a user, I can find the Speed of the wind	3	Medium	J.Gowdham N.Sivasurya S.Babu S.Sayedhasan
Sprint-2		USN-5	As a user, I can find the Direction of the wind	5	High	J.Gowdham N.Sivasurya S.Babu S.Sayedhasan

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-2		USN-6	Once I have find the wind direction, I can use this information to getting high energy output	6	Medium	J.Gowdham N.Sivasurya S.Babu S.Sayedhasan
Sprint-2		USN-7	If I get the current Wind speed,I can predict the energy output	7	High	J.Gowdham N.Sivasurya S.Babu S.Sayedhasan
Sprint-3	Building UI	USN-8	As a customer when I enter the weather details the website should predict the approximate turbine power.	20	High	J.Gowdham N.Sivasurya S.Babu S.Sayedhasan
Sprint-3		USN-9	As a customer I can access the website to predict the turbine energy output.	20	Medium	J.Gowdham N.Sivasurya S.Babu S.Sayedhasan
Sprint-4	Hosting,Storage & Deployment	USN-10	. As a customer, I wish to store my predictions and make analyses.	10	Low	J.Gowdham N.Sivasurya S.Babu S.Sayedhasan
Sprint-4		USN-11	As an administrator, I should maintain the website and update the website regularly	10	Low	J.Gowdham N.Sivasurya S.Babu S.Sayedhasan

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	9 Days	24 Oct 2022	01 Nov 2022	20	01 Nov 2022
Sprint-2	20	5 Days	01 Nov 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	4 Days	14 Nov 2022	17 Nov 2022	20	17 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 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>

