

**Project Planning Phase**  
**Sprint Delivery Plan (Product Backlog, Sprint Planning, Stories, Story points)**

Date	16 November 2022
Team ID	PNT2022TMID52191
Project Name	Predicting the energy output of wind turbine based on weather conditions
Maximum Marks	8 Marks

**Product Backlog, Sprint Schedule, and Estimation:**

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	Faheem Ananth Ukkasha Selva Ramesh
Sprint-1		USN-2	As a user, I will receive confirmation email once I have registered for the application	5	High	Faheem Ananth Ukkasha Selva Ramesh
Sprint-1		USN-3	As a user, I can register for the application through mobile number.	3	Low	Faheem Ananth Ukkasha Selva Ramesh

Sprint-1		USN-4	As a user, I can register for the application through Gmail	2	Medium	Faheem Ananth Ukkasha Selva Ramesh
----------	--	-------	---	---	--------	--

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	Faheem Ananth Ukkasha Selva Ramesh
Sprint-2	Dashboard	USN-6	Once logged in, I can access my dashboard	6	Medium	Faheem Ananth Ukkasha Selva Ramesh
Sprint-2	Web Access	USN-7	As a user, I can access the website to predict the turbine power	7	High	Faheem Ananth Ukkasha Selva Ramesh
Sprint-2	Prediction	USN-8	As a customer, when I enter the detail the website should predict the approximate turbine power	7	High	Faheem Ananth Ukkasha Selva Ramesh
Sprint-3	Analysis	USN-9	As a customer, I wish to store my predictions and make analysis	10	Medium	Faheem Ananth Ukkasha Selva Ramesh

Sprint-3	Security	USN-10	As a customer I expect my data to be secured	10	Medium	Faheem Ananth Ukkasha Selva Ramesh
----------	----------	--------	--	----	--------	--

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-4	Database Access	USN-11	As an administrator, I should maintain the website and keep updating it regularly	20	Medium	Faheem Ananth Ukkasha Selva Ramesh

### 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	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)

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

Sprint	Total Story Points	Duration	Sprint Start Date	Sprint End Date (Planned)	Story Points Completed (as on Planned End Date)	Sprint Release Date (Actual)	Average Velocity (AV)
Sprint-1	20	6 Days	24 Oct 2022	29 Oct 2022	20	29 Oct 2022	3.333
Sprint-2	20	6 Days	31 Oct 2022	05 Nov 2022	20	05 Nov 2022	3.333
Sprint-3	20	6 Days	07 Nov 2022	12 Nov 2022	20	12 Nov 2022	3.333
Sprint-4	20	6 Days	14 Nov 2022	19 Nov 2022	20	19 Nov 2022	3.333

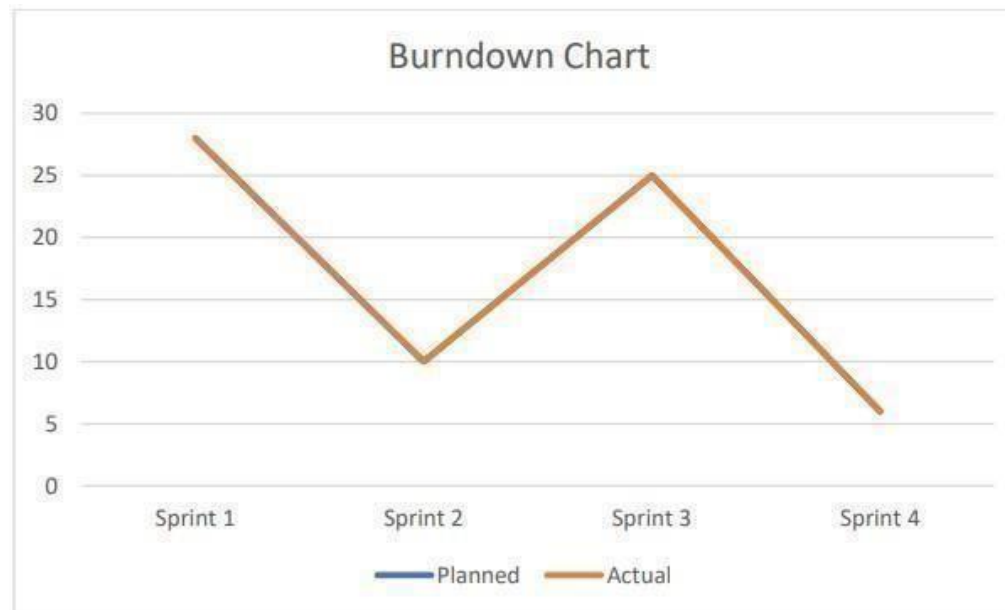
Total No of Days = 6 + 6 + 6 + 6 = 24 Days

Total Story Points = 20 + 20 + 20 + 20 = 80 Points

Average Velocity Per Sprint = 80 / 24 = 3.333

### **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-chart>