

## Project Planning Phase

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

Date	18 October 2022
Team ID	PNT2022TMID26268
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	Santhosh Kumar.C Ragul.N Subash.S Ragul Kumar.P
Sprint-1		USN-2	As a user, I will receive confirmation email once I have registered for the application	5	High	Santhosh Kumar.C Ragul.N Subash.S Ragul Kumar.P
Sprint-1		USN-3	As a user, I can register for the application through Phone number	2	Low	Santhosh Kumar.C Ragul.N Subash.S Ragul Kumar.P
Sprint-1		USN-4	As a user, I can register for the application through Gmail	3	Medium	Santhosh Kumar.C Ragul.N Subash.S

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
						Ragul Kumar.P
Sprint-1	Login(User)	USN-5	As a user, I can log into the application by entering email & password.	5	High	Santhosh Kumar.C Ragul.N Subash.S Ragul Kumar.P
Sprint-2	Dashboard	USN-6	Once I have logged in, I can see my dashboard.	6	Medium	Santhosh Kumar.C Ragul.N Subash.S Ragul Kumar.P
Sprint-2	Web access	USN-7	As a customer I can access the website to predict the turbine power.	7	High	Santhosh Kumar.C Ragul.N Subash.S Ragul Kumar.P
Sprint-2	Prediction	USN=8	As a customer when I enter the weather details the website should predict the approximate turbine power.	7	High	Santhosh Kumar.C Ragul.N Subash.S Ragul Kumar.P
Sprint-3	Analysis	USN-9	As a customer, I wish to store my predictions and make analysis.	10	Medium	Santhosh Kumar.C Ragul.N Subash.S Ragul Kumar.P
Sprint-3	Security	USN-10	As a customer I expect my data to be secured.	10	Medium	Santhosh Kumar.C Ragul.N Subash.S

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
						Ragul Kumar.P
Sprint-4	Database Access	USN-11	A Administrator, I should maintain the website. And update the website regularly.	20	Low	Santhosh Kumar.C Ragul.N Subash.S Ragul Kumar.P

#### 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		
Sprint-2	20	6 Days	31 Oct 2022	05 Nov 2022		
Sprint-3	20	6 Days	07 Nov 2022	12 Nov 2022		
Sprint-4	20	6 Days	14 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)

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

**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>