

## Project Planning Phase

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

Date	18 October 2022
Team ID	PNT2022TMID31390
Project Name	Project - 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 a 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, and password, and confirming my password.	2	High	VIDHYAMBIKA S.R
Sprint-1		USN-2	As a user, I will receive a confirmation email once I have registered for the application	1	High	VIDHYAMBIKA S.R
Sprint-1	Login	USN-3	As a user, I can log into the application by entering my email & password	2	High	VIDHYAMBIKA S.R
Sprint-2		USN-4	As a user, I can use Forgot Password option to reset my password if I forgot my current password	2	Medium	VIDHYAMBIKA S.R
Sprint-3	Dashboard	USN-5	As a user, I can access the Dashboard to view my profile	1	Low	VIDHYAMBIKA S.R
Sprint-1		USN-6	As a user, I can access the Dashboard to give my location, actual output power for prediction	2	High	VIDHYAMBIKA S.R
Sprint-1		USN-7	As a user, I can enter the height of the Wind Mill	2	High	VIDHYAMBIKA S.R
Sprint-1		USN-8	As a user, I can make a prediction	2	High	VIDHYAMBIKA S.R
Sprint-3	Profile	USN-9	As a user, I can edit my profile from time to time	1	Low	VIDHYAMBIKA S.R

<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-1	View Prediction	USN-11	As a user, I can view the prediction made	2	High	VIDHYAMBIKA S.R
Sprint-3	Download Prediction	USN-12	As a user, I can download the prediction either as pdf or png	1	Low	VIDHYAMBIKA S.R
Sprint-1	Notification	USN-13	As a user, I can send notifications to secondary consumers if the predicted output will not be able to generate due to unexpected weather changes and outages	2	High	VIDHYAMBIKA S.R
Sprint-4	View previous values	USN-14	As a user, I can view previously predicted values, actual output values, wind speed at that time, and weather.	2	Low	VIDHYAMBIKA S.R
Sprint-1	IBM Cloud	USN-15	As an administrator, I can store actual output power, predicted value, weather, and wind speed	2	High	VIDHYAMBIKA S.R
Sprint-1		USN-16	As an administrator, I can feed all the stored data as parameters back to the model for more accurate prediction	2	High	VIDHYAMBIKA S.R
Sprint-2	Login	USN-17	As an administrator, I can reset passwords for customers	2	Medium	VIDHYAMBIKA S.R
Sprint-4		USN-18	As an administrator, I can reset password using Forgot password option	1	Low	VIDHYAMBIKA S.R
Sprint-4	Content Optimization	USN-19	As an administrator, I can Add/Remove/Modify contents as required	1	Low	VIDHYAMBIKA S.R
Sprint-4	Accounts Management	USN-20	As an administrator, I can edit permission settings for accounts and manage user accounts	1	Low	VIDHYAMBIKA S.R
Sprint-2	Customer Data Management	USN-21	As an administrator, I can store and manage predicted values, live data, actual power output	2	Medium	VIDHYAMBIKA S.R
Sprint-3		USN-22	As an administrator, I can make and Store comparison table / curve of Actual Output and Predicted Output for users	2	Low	VIDHYAMBIKA S.R
Sprint-3	Customer Care Support	USN-23	Manage customer queries	2	Low	VIDHYAMBIKA S.R

**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	19	6 Days	24 Oct 2022	29 Oct 2022		6 Nov 2022
Sprint-2	8	6 Days	31 Oct 2022	05 Nov 2022		9 Nov 2022
Sprint-3	6	6 Days	07 Nov 2022	12 Nov 2022		12 Nov 2022
Sprint-4	4	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)

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

Jira Website: <https://pnt2022tmid31390.atlassian.net/>

### **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>