

## Project Planning Phase

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

Date	21 October 2022
Team ID	PNT2022TMID30223
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	Registration	USN-1	As a user, I can register for the application by entering my email and password, and confirming my password.	5	High	Simon Christopher P
Sprint-1		USN-2	As a user, I can register for the application through a Mobile number.	3	Low	Vignesh C
Sprint-1		USN-3	As a user, I can register for the application through Gmail	4	Medium	Suman A
Sprint-1	Login	USN-4	As a user, I can log into the application by entering my email & password	5	High	VishnuVignesh Y
Sprint-2	Select City	USN-5	As a user, I should select the city to find the weather details of that city.	5	High	Praveen Kumar S
Sprint-2	Weather Details	USN-6	As a user, I can view the current weather conditions of the selected city.	5	High	Simon Christopher P
Sprint-3	User Input	USN-7	As a user, I should give the theoretical power and wind speed to predict the energy output.	5	High	Suman A
Sprint-4	Energy Output	USN-8	As a user, I can view the predicted energy output of wind Turbines.	5	High	VishnuVignesh Y

Sprint-3	User details	USN-9	As an admin, I should store the details of the user.	6	Medium	Simon Christopher p
Sprint-2	Data Pre-Processing	USN-10	As an admin, I should clean and pre-process data using pandas.	5	High	Suman A
Sprint-2		USN-11	As an admin, I should train and test the dataset using sklearn.	5	High	VishnuVignesh Y
Sprint-3	Model Building	USN-12	As an admin, I should predict the accuracy of data using supervised machine learning.	12	High	Vignesh C
<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-4	API	USN-13	As an admin, I should connect the presentation tier, logic tier, and data tier using python flask.	10	High	Vignesh C
Sprint-4	Notification	USN-14	As an admin, I should send the prediction chart via mail	5	Medium	Praveen Kumar S

#### 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	17	8 Days	22 Oct 2022	29 Oct 2022		
Sprint-2	20	4 Days	31 Oct 2022	03 Nov 2022		
Sprint-3	23	5 Days	04 Nov 2022	08 Nov 2022		
Sprint-4	20	4 Days	09 Nov 2022	12 Nov 2022		

**Velocity:**

Average velocity of sprint-1:  $AV = 17/8 = 2.125$

Average velocity of sprint-2:  $AV = 15/4 = 5$

Average velocity of sprint-3:  $AV = 18/5 = 4.6$

Average velocity of sprint-4:  $AV = 20/4 = 5$