

Project Planning Phase

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

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| Date | 18 October 2022 |
| Team ID | PNT2022TMID31617 |
| 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 | Pragadesh M Santhosh M Nirmal kumar K Haran M |
| Sprint-1 | | USN-2 | As a user, I will receive confirmation email once I have registered for the application | 5 | High | Pragadesh M Santhosh M Haran M Nirmal kumar k |
| Sprint-1 | | USN-3 | User should verify the email once they have created their account. | 2 | Low | Pragadesh M Santhosh M Nirmal kumar K |
| Sprint-1 | | USN-4 | As a user, I can register for the application through Gmail | 3 | Medium | Haran M Nirmal kumar K |

| Sprint | Functional Requirement (Epic) | User Story Number | User Story / Task | Story Points | Priority | Team Members |
|----------|-------------------------------|-------------------|---|--------------|----------|--|
| | | | | | | Santhosh M Pragadesh M |
| Sprint-1 | Login | USN-5 | As a user, I can log into the application by entering email & password | 5 | High | Pragadesh M Haran M |
| Sprint-2 | Dashboard | USN-6 | Once I have logged in, I can see my dashboard. | 6 | Medium | Pragadesh M Santhosh M Nirmal kumar K Haran M |
| Sprint-2 | Web access | USN-7 | As a customer I can access the website to predict the turbine power | 7 | High | Pragadesh M Santhosh M Nirmal kumar K Haran M |
| Sprint-2 | Prediction | USN=8 | As a customer when I enter the weather details, the website should predict the approximate turbine power | 7 | High | Pragadesh M Santhosh M Haran M Nirmal kumar K |
| Sprint-3 | | USN-9 | Customer can also provide the latitude and longitude of any location, and our web app will predict the wind power based on the wind speed and wind direction of the location given. | 10 | Medium | Pragadesh M Haran M Nirmal kumar K |
| Sprint-3 | Forecasting | USN-10 | Customer can enter latitude and longitude of any location, our website will forecast wind | 5 | Medium | Santhosh M Pragadesh M |

| Sprint | Functional Requirement (Epic) | User Story Number | User Story / Task | Story Points | Priority | Team Members |
|----------|-------------------------------|-------------------|--|--------------|----------|---|
| | | | speed , wind direction and wind power for next 6 days. | | | Pragadesh M Santhosh M |
| Sprint-3 | Plotting | USN-11 | Website provides various charts to make the customer understand the speed, direction and power visually. | 3 | Low | Pragadesh M Nirmal kumar K Haran M |
| Sprint-3 | Security | USN-12 | As a customer I expect my data to be secured | 2 | Low | Pragadesh M Santhosh M |
| Sprint-4 | Database Access | USN-13 | As an Administrator, I should maintain the website. And update the website regularly. | 20 | High | Pragadesh M Nirmal kumar K Santhosh M |

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 | Total Story Points | Duration | Sprint Start Date | Sprint End Date (Planned) | Story Points Completed (as on Planned End Date) | Sprint Release Date (Actual) |
|----------|--------------------|----------|-------------------|---------------------------|---|------------------------------|
| Sprint-3 | 20 | 6 Days | 07 Nov 2022 | 12 Nov 2022 | | |
| Sprint-4 | 20 | 6 Days | 14 Nov 2022 | 19 Nov 2022 | | |
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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 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>