# Project Planning Phase

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

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|---|---|
| Date | 24 October 2022 |
| Team ID | PNT2022TMID28832 |
| 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)

Use the below template to create product backlog and sprint schedule

| **Sprint** | Functional Requirement (Epic) | User Story Number | User Story / Task | Acceptance criteria | Priority | **Team Members** |
|---|---|---|---|---|---|---|
| Sprint-1 | Information about wind energy | USN-1 | As a user I have learned about wind energy | It provides short and good information wind energy | Low | Lakshmikadhanvelu |
| Sprint-1 | | USN-2 | As a user I can know about wind turbine | It useful in understand the wind energy | Low | Lakshmikadhanvelu |
| Sprint-2 | Predicting Energy Wind Output | USN-3 | I can able to predict the wind energy output | It Provides accurately the wind speed | High | Sanjai V S |
| Sprint-2 | | USN-4 | I can get energy output for the wind | It is help so I can easily predict energy output | High | Sudharson V K |
| Sprint-2 | Weather Checking | USN-5 | I can check the weather of my state. | It provides weather condition in different states | Medium | Jeyganesh s |
| | | USN-6 | I can check the weather condition for windmill | It provides weather condition and it helps in predicting energy output | Medium | Sanjai V S |
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**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 | 06 Nov 2022 |
| Sprint-3 | 20 | 6 Days | 07 Nov 2022 | 12 Nov 2022 | 20 | 15 Nov 2022 |
| Sprint-4 | 20 | 6 Days | 14 Nov 2022 | 19 Nov 2022 | 20 | 20 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)

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

**Burndown Chart:**

# BURNDOWN CHART

| Days | Goal | Done | Goal velocity | Remaining |
|---|---|---|---|---|
| 0 | 6 | 4 | 1.5 | 2 |
| 7 | 12 | 3 | 3 | 3 |
| 13 | 18 | 2 | 5 | 4 |
| 19 | 24 | 1 | 7 | 5 |
| 25 | 30 | 0 | 9 | 6 |
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