

Project Planning Phase

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

| | |
|--------------|---|
| Team ID | PNT2022TMID39504 |
| Project Name | Predicting the energy output of wind turbine based on weather condition |

Product Backlog, Sprint Schedule, and Estimation

| 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 | Suji.G |
| Sprint-1 | | USN-2 | As a user I can know about wind turbine | It is useful in understand the wind energy | Low | Monika.S |
| Sprint-2 | Predicting Energy Wind Output | USN-3 | I can able to predict the wind energy output | It Provides accurately the wind speed | High | Anandhi.Y |
| Sprint-2 | | USN-4 | I can get energy output for the wind | It is help so I can easily predict energy output | High | Muthamizhselvi. N |
| Sprint-2 | Weather Checking | USN-5 | I can check the weather of my state. | It provides weather condition in different states | Medium | Monika.S |
| | | USN-6 | I can check the weather condition for windmill | It provides weather condition and it helps in predicting energy output | Medium | Muthamizhselvi.N |

\

Project Tracker, Velocity & Burndown Chart:

| 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 |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

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)

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

Burn down 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 |

