

Project Planning Phase

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

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|---------------|---|
| Date | 23 November 2022 |
| Team ID | PNT2022TMID42592 |
| 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 | Story Points | Priority | Team Members |
|----------|-----------------------------------|-------------------|---|--------------|----------|---|
| Sprint-1 | Data Collection and Preprocessing | USN-1 | As a user, I am unable to engage with anything | 9 | Medium | Nagaraj G Palani Selvam M Pasupathi Dadeeja |
| Sprint-2 | Performance Testing | USN-2 | As a user, I am unable to engage with anything | 6 | High | Nagaraj G Palani Selvam M Pasupathi Dadeeja |
| Sprint-2 | Execute and Test your Model | USN-3 | As a user, I can predict the wind energy using the best created ML models | 5 | High | Nagaraj G Palani Selvam M Pasupathi Dadeeja |
| Sprint-3 | Train the ML model | USN-4 | As a user, I can predict wind energy using the user interface | 6 | Medium | Nagaraj G Palani Selvam M Pasupathi Dadeeja |

| Sprint | Functional Requirement (Epic) | User Story Number | User Story / Task | Story Points | Priority | Team Members |
|----------|--|-------------------|---|--------------|----------|---|
| Sprint-3 | Integrate Flask with Model | USN-5 | As a user, I can predict the wind energy using the best created ML models | 5 | High | Nagaraj G Palani Selvam M Pasupathi Dadeeja |
| Sprint-4 | Model Deployment on IBM cloud using IBM watson | USN-6 | As a user, I can use the model by requesting the deployed model on cloud | 9 | High | Nagaraj G Palani Selvam M Pasupathi Dadeeja |

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 | 9 | 4 Days | 24 Oct 2022 | 27 Oct 2022 | 9 | 28 Oct 2022 |
| Sprint-2 | 11 | 6 Days | 31 Oct 2022 | 05 Nov 2022 | 11 | 06 Nov 2022 |
| Sprint-3 | 11 | 5 Days | 07 Nov 2022 | 11 Nov 2022 | 11 | 12 Nov 2022 |
| Sprint-4 | 9 | 5 Days | 14 Nov 2022 | 18 Nov 2022 | 9 | 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)

$$AV = \frac{\text{sprint duration}}{\text{velocity}}$$

$$= 9+11+11+9/20 = 2.0$$

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.

Burndown Chart

