

## Project Planning Phase

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

Date	19 October 2023
Team ID	NM2023TMID07506
Project Name	Solar Panel Forecasting
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 Processing	USN-1	The admin is responsible for managing the data used in the forecasting process. This includes collecting and organizing historical solar generation data, weather data, and any other relevant inputs required for accurate forecasting. The admin ensures the data is reliable, up-to-date, and properly stored for easy access.	2	High	Pratheek
Sprint-2	Report	USN-2	The reporter presents the forecasted results in a format that is easy to comprehend. This may include visualizations, charts, graphs, or tables that effectively convey the predicted solar power generation over a specific time period.	2	Medium	Pranesh
Sprint-3	Developing software	USN-3	Developers work on designing software architecture that supports solar panel forecasting. They determine the optimal structure and components of the forecasting system, considering factors such as scalability, modularity, and performance.	2	Medium	Arjun Krishnan

Sprint-4	Customer Login	USN-4	Customers need to register for an account on the forecasting platform. This involves providing necessary information such as name, contact details, and possibly additional authentication factors for security purposes.	2	Medium	Karthik
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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	1 Days	16 Oct 2023	16 Oct 2023	16 Oct 2023	16 Oct 2023
Sprint-2	20	1 Days	17 Oct 2023	17 Oct 2023	17 Oct 2023	17 Oct 2023
Sprint-3	20	1 Days	18 Oct 2023	18 Oct 2023	18 Oct 2023	18 Oct 2023
Sprint-4	20	1 Days	19 Oct 2023	19 Oct 2023	19 Oct 2023	19 Oct 2023

**Velocity:**

Imagine we have a 6-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)

$$AV = \frac{\text{sprint duration}}{\text{velocity}} = \frac{20}{6} = 3.4$$

**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.

**Reference:**

**[https://www.researchgate.net/publication/348418456\\_Solar\\_Power\\_Forecasting\\_A\\_Review](https://www.researchgate.net/publication/348418456_Solar_Power_Forecasting_A_Review)**