Project Planning Phase

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

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task Description	Story Points	Priority	Team Members
Sprint-1	Data collection and integration	USN-1	Gather relevant environmental data, including temperature, humidity, soil moister, and light levels	7	High	Hari Yaswanth. S
	Data Preparation	USN-2	Cleans the collected data for analysis.	8	High	Hari Yaswanth. S
Sprint-2	Data Analysis	USN-3	Utilize Power BI's analytical tools to explore relationships between environmental factors and plant growth stages.	5	Low	Sannif. SK
	Visualization Development	USN-4	Create interactive visualization for key metrics.	6	Medium	Sannif.SK
	Dashboard Design	USN-5	Design user-friendly interfaces that allows stakeholders to easily access and interpret data.	8	High	Vishnu.P.V.V.N

Date	15 February 2025
Team ID	PNT2025TMID07045
Project Name	Prediction plant growth stages with environment and management data using power BI
Maximum Marks	5 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-2	Data Analysis	USN-3	Utilize Power BI's analytical tools to explore relationships between environmental factors and plant growth stages.	5	Low	Sannif.SK
	Visualization Development	USN-4	Create interactive visualization for key metrics.	6	Medium	Vishnu.P.V.V.N
	Dashboard Design	USN-5	Design user-friendly interfaces that allows stakeholders to easily access and interpret data.	8	High	Sannif.SK

Project Tracker, Velocity & Burndown Chart: (4 Marks)

Sprint	Total Story Points	Duration (Days)	Start Date	End Date (Planned)	Story Points Completed (Planned)	Release Date (Actual)
Sprint1	20	6	2 feb 2025	7 feb 2025	20	29 Oct 2022

Sprint1	20	6	7 feb 2025	12 feb 2025	20	05 Nov 2022
Sprint2	20	6	12 feb 2025	17 feb 2025	TBD	TBD
Sprint2	20	6	17 feb 2025	22 feb 2025	TBD	TBD

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:

A burndown chart illustrates:

- X-axis: Sprint duration (time in days).
- Y-axis: Remaining story points.
- It starts with 20 story points at day 0 and decreases daily based on completed points.