Project Planning Phase

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

Date	20 March 2025
Team ID	PNT2025TMID07288
Project Name	Global Food Production Trends and Analysis: A Comprehensive Study from 1961 to 2023 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-1	Data Collection and Integration	USN-1	Users (researchers, policymakers, analysts) register and log in to the platform.	7	High	Mundru Rupadevi
Sprint-2	Data Analysis and Modelling	USN-2	The system collects and cleans global food production data from FAO, USDA, and other sources.	8	High	Mundru Rupadevi
Sprint-2	Data Visualization	USN-3	The processed data is stored in a structured format for analysis and visualization.	5	Low	Mundru Rupadevi
Sprint-2	Dashboard Design	USN-4	Users can access a Power BI dashboard displaying key food production trends over the years	6	Medium	Mundru Rupadevi
Sprint-3	Implementation	USN-5	Users can filter, sort, and compare food production trends by country, commodity, and year.	7	High	Mundru Rupadevi
Sprint -3	Feedback	USN-6	Machine learning models predict future food production trends based on historical data.	6	Medium	Mundru Rupadevi
Sprint-4	Evaluation and Continuous Improvement	USN-7	Users can generate, customize, and download reports in CSV, PDF, and Power BI formats	8	High	Mundru Rupadevi

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-4	Maintenance	USN-8	The system ensures fast loading times and supports large datasets and concurrent users.	9	High	Mundru Rupadevi

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	**7**	**5 Days**	**22 Feb 2025**	**27 Feb 2025**	**8**	**27 Feb 2025**
Sprint-2	**19**	**10 Days**	**28 Feb 2025**	**8 Mar 2025**	**20**	**8 Mar 2025**
Sprint-3	**11**	**5 Days**	**9 Mar 2025**	**14 Mar 2025**	**12**	**14 Mar 2025**
Sprint-4	**15**	**5 Days**	**15 Mar 2025**	**20 Mar 2025**	**16**	**20 Mar 2025**

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)

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

Velocity :

Total Story Points Completed:56

Total Number of Sprints=4

Velocity=Total Story Points Completed / Total Number of Sprints

Velocity = 56/4=14