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

Date	29 June 2025
Team ID	LTVIP2025TMID59682
Project Name	Comprehensive Analysis and Dietary Strategies with Tableau: A College Food Choices Case Study
Maximum Marks	5 Marks

Product Backlog, Sprint Schedule, and Estimation (4 Marks)

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1	Data Collection & Setup	USN-1	As a data analyst, I need to collect and load the college food choices dataset into the analysis environment	2	High	ALL
Sprint-1	Data Collection & Setup	USN-2	As a data analyst, I need to validate the dataset structure and identify all available fields (GPA, Gender, dietary habits, etc.)	1	High	ALL
Sprint-1	Data Preprocessing	USN-3	As a data analyst, I need to handle missing values in the dataset to ensure data quality	3	High	ALL

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1	Data Preprocessing	USN-4	As a data analyst, I need to clean and standardize categorical variables (comfort_food_reasons_coded, diet_current_coded, etc.)	3	High	ALL
Sprint-1	Data Preprocessing	USN-5	As a data analyst, I need to validate and transform numerical variables (calories, GPA, income) for analysis	2	Medium	ALL
Sprint-2	Exploratory Data Analysis	USN-6	As a researcher, I want to analyze demographic patterns (gender, grade_level, employment) to understand the student population	3	High	ALL
Sprint-2	Exploratory Data Analysis	USN-7	As a researcher, I want to examine dietary habits and food preferences across different student groups	5	High	ALL
Sprint-2	Exploratory Data Analysis	USN-8	As a researcher, I want to analyze the relationship between GPA and eating habits to identify academic performance correlations	3	High	ALL
Sprint-2	Statistical Analysis	USN-9	As a researcher, I want to perform correlation analysis between lifestyle factors and food choices	3	Medium	ALL

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-3	Tableau Dashboard Development	USN-10	As a stakeholder, I want to see interactive visualizations of student demographics and food preferences	5	High	ALL
Sprint-3	Tableau Dashboard Development	USN-11	As a stakeholder, I want to view caloric intake analysis and nutritional patterns through dynamic charts	5	High	ALL
Sprint-3	Tableau Dashboard Development	USN-12	As a stakeholder, I want to explore comfort food preferences and their reasons through interactive filters	3	Medium	ALL
Sprint-4	Advanced Analytics	USN-13	As a researcher, I want to identify dietary strategy recommendations based on student segments	5	High	ALL
Sprint-4	Advanced Analytics	USN-14	As a researcher, I want to create predictive models for healthy eating patterns	8	Medium	ALL
Sprint-4	Documentation & Reporting	USN-15	As a project manager, I need comprehensive documentation of findings and methodology	3	High	ALL
Sprint-4	Documentation & Reporting	USN-16	As a stakeholder, I want a final presentation with actionable dietary strategies and insights	2	High	ALL

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	11	1 Days	27 JUNE 2025	27 JUNE 2025	20	27 JUNE 2025
Sprint-2	14	1 Days	28 JUNE 2025	28 JUNE 2025	20	28 JUNE 2025
Sprint-3	13	1 Days	29 JUNE 2025	29 JUNE 2025	20	29 JUNE 2025
Sprint-4	18	1 Days	30 JUNE 2025	30 JUNE 2025	20	30 JUNE 2025

Velocity

Velocity measures the amount of work a team can complete in a single sprint.

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):

Velocity = Story Points Completed / Sprint Duration

$$AV = \frac{\text{sprint duration}}{\text{velocity}} = \frac{20}{10} = 2 \text{ (story points per day)}$$