Project Planning Phase

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

Date	27 June 2025
Team ID	LTVIP2025TMID41438
Project Name	GrainPalette - A Deep Learning Odyssey In Rice Type Classification Through Transfer Learning
Maximum Marks	5 Marks

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

Product backlog and sprint schedule:

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1	Data Acquisition & Cleaning	USN-1	As a data scientist, I want to collect, clean, and label rice grain image dataset	5	High	N. Sravanthi
Sprint-2	Model Building	USN-2	As a developer, I want to build a classification model using MobileNetv4	2	Medium	A. Amrutha
Sprint-2	Model Testing & Evaluation	USN-4	As a team, we want to generate visual insights and detect outliers from the data.	3	Medium	A. Amrutha

Sprint-3	Front-End Interface	USN-5	As a UI/UX designer, I want to create an HTML upload page for user interaction	4	High	M. Likitha
Sprint-3	Evaluation	USN-6	As a QA engineer, I want to evaluate model accuracy using cross-validation.	3	High	B. Mounika
Sprint-4	Deployment	USN-7	As a developer, I want to deploy the model via a web interface for user interaction.	3	Medium	M. Bhavana
Sprint-4	Report Generation	USN-8	As a user, I want to generate a report summarizing patient liver status and risk.	2	Low	M. Likitha

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	5	5 Days	4 June 2025	9 June 2025	5	10 June 2025
Sprint-2	5	5 Days	10 June 2025	15 June 2025	5	15 June 2025

Sprint-3	7	5 Days	16 June 2025	21 June 2025	7	21 June 2025
Sprint-4	5	5 Days	22 June 2025	27 June 2025	5	27 June 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)

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