Project Planning Phase

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

Date	21 June 2025
Team ID	LTVIP2025TMID60726
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)

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	Image data collection	USN-1	As a user, I want to collect and label different rice grain images for training the model.	3	High	1.Deevi Himavanth sai 2.Lala Yashoda 3.Banavath Sankar Naik 4.Yerva Siva Gopal Reddy
Sprint-1	Data preprocessing	USN-2	As a developer, I want to preprocess the rice images (resize, normalization) to improve model accuracy.	2	High	1.Deevi Himavanth sai 2.Lala Yashoda 3.Banavath Sankar Naik

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
						4.Yerva Siva Gopal Reddy
Sprint-2	Model traning	USN-3	As a data scientist, I want to apply transfer learning on a pre-trained CNN model to classify rice types.	5	high	1. .Deevi Himavanth sai 2.Lala Yashoda 3.Banavath Sankar Naik 4.Yerva Siva Gopal Reddy
Sprint-2	Model evaluation	USN-4	As a developer, I want to evaluate the model using accuracy, confusion matrix, and classification report.	2	medium	1. .Deevi Himavanth sai 2.Lala Yashoda 3.Banavath Sankar Naik 4.Yerva Siva Gopal Reddy
Sprint-3	Ui development	USN-5	As a user, I want to upload a rice grain image through a simple web or mobile app and get classification results.	3	medium	1. .Deevi Himavanth sai 2.Lala Yashoda 3.Banavath Sankar Naik

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
						4.Yerva Siva Gopal Reddy
Sprint -3	Deployment	USN-6	As a developer, I want to deploy the trained model and integrate it with the frontend for real- time use.	4	low	1. .Deevi Himavanth sai 2.Lala Yashoda 3.Banavath Sankar Naik 4.Yerva Siva Gopal Reddy

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	6 Days	15 June 2025	20 June 2025	20	20 June 2025
Sprint-2	20	6 Days	17 June 2025	22 June 2025	20	22 June 2025
Sprint-3	20	6 Days	19 June 2025	24 June 2025	20	24 June 2025

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-4	20	6 Days	21 June 2025	26 June 2025	20	26 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)

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

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.

https://www.visual-paradigm.com/scrum/scrum-burndown-chart/

https://www.atlassian.com/agile/tutorials/burndown-charts

Reference:

https://www.atlassian.com/agile/project-management

https://www.atlassian.com/agile/tutorials/how-to-do-scrum-with-jira-software

https://www.atlassian.com/agile/tutorials/epics

https://www.atlassian.com/agile/tutorials/sprints

https://www.atlassian.com/agile/project-management/estimation

https://www.atlassian.com/agile/tutorials/burndown-charts