Project Planning Phase

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

Date	20 June 2025
Team ID	LTVIP2025TMID60795
Project Name	Pattern Sense: Classifying Fabric Patterns Using Deep 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	Data Collection & Pre-processing	USN-1	As a developer, I can collect a dataset of labelled fabric pattern images.	2	High	Ch Sambasiva Rao
Sprint-1		USN-2	As a developer, I can clean and pre-process the dataset (resize, normalize, etc.)	1	High	Ch Sambasiva Rao
Sprint-2	Model Development	USN-3	As a developer, I can design a CNN architecture suitable for pattern recognition.	2	Low	Ch Sambasiva Rao
Sprint-2		USN-4	As a developer, I can train the model and evaluate accuracy on test data.	2	Medium	Ch Sambasiva Rao
Sprint-3	UI Development	USN-5	As a user, I can upload an image and get the predicted fabric pattern.	3	Medium	Prameela Grandi
Sprint-3		USN-6	As a user, I can view a summary of prediction accuracy.	2	Medium	Prameela Grandi
Sprint-4	Model Optimization	USN-7	As a developer, I can tune hyperparameters to improve model performance.	2	Low	Prameela Grandi
Sprint-4	Documentation & Final Report	USN-8	As a team, we can prepare final documentation and results report.	2	High	Prameela Grandi

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	6 Days	24 Jun 2025	26 Jun 2025	5	27 Jun 2025
Sprint-2	6	6 Days	24 Jun 2025	26 Jun 2025	6	27 Jun 2025
Sprint-3	5	6 Days	24 Jun 2025	26 Jun 2025	5	27 Jun 2025
Sprint-4	4	6 Days	24 Jun 2025	26 Jun 2025	4	27 Jun 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