**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)



**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](https://www.visual-paradigm.com/scrum/what-is-agile-software-development/) methodologies such as [Scrum](https://www.visual-paradigm.com/scrum/scrum-in-3-minutes/). 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.visual-paradigm.com/scrum/scrum-burndown-chart/)

[**https://www.atlassian.com/agile/tutorials/burndown-charts**](https://www.atlassian.com/agile/tutorials/burndown-charts)

**Reference:**

[**https://www.atlassian.com/agile/project-management**](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/how-to-do-scrum-with-jira-software)

[**https://www.atlassian.com/agile/tutorials/epics**](https://www.atlassian.com/agile/tutorials/epics)

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[**https://www.atlassian.com/agile/tutorials/burndown-charts**](https://www.atlassian.com/agile/tutorials/burndown-charts)