Project Planning Document

📅 Date: 28 June 2025

👥 Team ID: LTVIP2025TMID46247

📌 Project Name: Classifying Fabric Patterns Using Deep Learning

🎯 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 | Dataset Handling | USF-1 | Load all fabric images into datasets | 3 | High | Member 1 |
| Sprint-1 | Data Visualization | USF-2 | View sample fabric images with labels | 2 | Medium | Member 2 |
| Sprint-1 | Preprocessing Pipeline | USF-3 | Normalize, shuffle, and cache datasets | 2 | High | Member 3 |
| Sprint-2 | Data Augmentation | USF-4 | Apply augmentation (flip, rotate, zoom) | 2 | Medium | Member 3 |
| Sprint-2 | Model Architecture | USF-5 | Create CNN model for fabric classification | 3 | High | Member 1 |
| Sprint-2 | Model Training | USF-6 | Train the model and evaluate accuracy | 3 | High | Member 2 |
| Sprint-3 | Prediction Function | USF-7 | Predict fabric type from new images | 2 | High | Member 4 |
| Sprint-3 | Model Deployment (Streamlit) | USF-8 | Create Streamlit UI for classification | 3 | High | Member 4 |
| Sprint-3 | Save and Load Model | USF-9 | Save trained model for deployment | 1 | High | Member 1 |

# 📈 Project Tracker, Velocity & Burndown Chart (4 Marks)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Sprint | Total Story Points | Duration | Sprint Start Date | Sprint End Date (Planned) | Story Points Completed | Sprint Release Date |
| Sprint-1 | 7 | 6 Days | 01 July 2025 | 06 July 2025 | 7 | 06 July 2025 |
| Sprint-2 | 8 | 6 Days | 07 July 2025 | 12 July 2025 | 8 | 12 July 2025 |
| Sprint-3 | 8 | 6 Days | 13 July 2025 | 18 July 2025 |  |  |

# 📊 Velocity

If each sprint is 6 days long and the team completes around 8 story points on average:

\*\*Avg Velocity = 8 story points / 6 days = 1.33 points/day\*\*

# 📉 Burndown Chart

Use the following tools to visualize work left vs. time:

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

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