Project Planning Phase

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

| Date | 20 June 2025 |
|---------------|----------------------------------------------------------------|
| Team ID | LTVIP2025TMID37802 |
| Project Name | pattern sense: classifying fabric patterns using deep learning |
| Maximum Marks | 5 Marks |

Product Backlog, Sprint Schedule, and Estimation:

| Sprint | Functional Requirement (Epic) | User Story Number | User Story / Task | Story Points | Priority | y Team Members |
|--------------|----------------------------------|----------------------|-------------------------------------------------------------------------------------------------------|-----------------|----------|-----------------------|
| Sprint- 1 | Data Collection & Preprocessing | USN-1 | As a developer, I can collect a diverse fabric image dataset from multiple sources | 2 | High | Vennela |
| Sprint- 1 | Data Collection & Preprocessing | USN-2 | As a developer, I can preprocess images (resize, normalize, augment) | 2 | High | Umesh benerjinaidu |
| Sprint- 1 | Data Labelling | USN-3 | As a developer, I can label images into correct fabric pattern categories | 2 | High | sowmya |
| Sprint- 2 | Model Design & Implementation | USN-4 | As a developer, I can design and implement a CNN-based deep learning model for pattern classification | 2 | High | Vennela |
| Sprint- 2 | Model Training | USN-5 | As a developer, I can train the model using labeled data to achieve high accuracy | 2 | High | Umesh benerjinaidu |
| Sprint- 2 | Model Evaluation | USN-6 | As a developer, I can evaluate the model using metrics (accuracy, precision, recall, F1-score) | 2 | Mediun | n sowmya |

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|--------------|----------------------------------|----------------------|-------------------------------------------------------------------------------------------|-----------------|----------|-----------------------|
| Sprint- 3 | Web Interface Integration | USN-7 | As a user, I can upload a fabric image and receive predicted pattern output | 2 | High | Vennela |
| Sprint- 3 | Visualization & Reporting | USN-8 | As a user, I can view a detailed report of prediction confidence and pattern distribution | 2 | Medium | sowmya |
| Sprint- 3 | Model Fine-tuning | USN-9 | As a developer, I can fine-tune the model based on feedback and improve performance | 3 | Medium | Umesh benerjinaidu |
| Sprint- 4 | Deployment & Testing | USN-10 | As a developer, I can deploy the model on a cloud platform and perform system testing | 2 | High | Vennela |
| Sprint- 4 | Documentation & User Guide | USN-11 | As a developer, I can create comprehensive documentation and a user guide | 2 | Medium | Umesh benerjinaidu |

Project Tracker, Velocity & Burndown Chart:

| 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 | 6 | 2 Days | 20 June 2025 | 21 June 2025 | 6 | 21 June 2025 |
| Sprint- 2 | 6 | 1 Day | 22 June 2025 | 22 June 2025 | 6 | 22 June 2025 |
| Sprint- | 7 | 2 Days | 23 June 2025 | 24 June 2025 | 7 | 24 June 2025 |
| Sprint- | 4 | 1 Day | 25 June 2025 | 25 June 2025 | 4 | 25 June 2025 |