**Project Planning Phase**

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

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| --- | --- |
| Date | 20 June 2025 |
| Team ID | LTVIP2025TMID35513 |
| 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** | **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 | Chaitanya |
| Sprint-1 | Data Collection & Preprocessing | USN-2 | As a developer, I can preprocess images (resize, normalize, augment) | 2 | High | Deepika |
| Sprint-1 | Data Labelling | USN-3 | As a developer, I can label images into correct fabric pattern categories | 2 | High | Rohith |
| 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 | Nikhilesh |
| Sprint-2 | Model Training | USN-5 | As a developer, I can train the model using labeled data to achieve high accuracy | 2 | High | Chaitanya |
| Sprint-2 | Model Evaluation | USN-6 | As a developer, I can evaluate the model using metrics (accuracy, precision, recall, F1-score) | 2 | Medium | Deepika |
| Sprint-3 | Web Interface Integration | USN-7 | As a user, I can upload a fabric image and receive predicted pattern output | 2 | High | Nikhilesh |
| Sprint-3 | Visualization & Reporting | USN-8 | As a user, I can view a detailed report of prediction confidence and pattern distribution | 2 | Medium | Rohith |
| Sprint-3 | Model Fine-tuning | USN-9 | As a developer, I can fine-tune the model based on feedback and improve performance | 3 | Medium | Chaitanya |
| Sprint-4 | Deployment & Testing | USN-10 | As a developer, I can deploy the model on a cloud platform and perform system testing | 2 | High | Deepika |
| Sprint-4 | Documentation & User Guide | USN-11 | As a developer, I can create comprehensive documentation and a user guide | 2 | Medium | Rohith |

**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-3** | **7** | **2 Days** | **23 June 2025** | **24 June 2025** | **7** | **24 June 2025** |
| **Sprint-4** | **4** | **1 Day** | **25 June 2025** | **25 June 2025** | **4** | **25 June 2025** |