

Project Planning Phase

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

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| Date | 27 June 2025 |
| Team ID | LTVIP2025TMID41035 |
| Project Name | Transfer Learning-Based Classification of Poultry Diseases for Enhanced Health Management |
| Maximum Marks | 5 Marks |

Product Backlog, Sprint Schedule, and Estimation (4 Marks)

Product backlog and sprint schedule:

| Sprint | Functional Requirement (Epic) | User Story Number | User Story / Task | Story Points | Priority | Team Members |
|----------|-------------------------------|-------------------|---|--------------|----------|------------------------------------|
| Sprint-1 | Dataset Preparation | USN-1 | As a data scientist, I will collect and clean the poultry disease dataset | 3 | High | Akula Roshitha |
| Sprint-1 | Preprocessing | USN-2 | As a developer, I will resize and normalize poultry images | 2 | High | Akula Roshitha |
| Sprint-2 | Model Building | USN-3 | As a developer, I will build a CNN using transfer learning (VGG16) | 3 | High | Kanderi Babu Trisha |
| Sprint-2 | Model Training | USN-4 | As a developer, I will train and evaluate the model on the dataset | 3 | High | Kanderi Babu Trisha |
| Sprint-3 | Fine-Tuning | USN-5 | As a developer, I will fine-tune the last layers of VGG16 for higher accuracy | 2 | Medium | Shaik Sinwan, Kancharla Maleeswari |
| Sprint-3 | Deployment | USN-6 | As a developer, I will deploy the model via a web interface for user interaction. | 3 | Medium | Shaik Sinwan |
| Sprint-4 | Flask Web UI | USN-7 | As a user, I will upload an image and get prediction results via Flask app | 3 | High | Kancharla Maleeswari |
| Sprint-4 | Report Generation | USN-8 | As a team, we will prepare screenshots and reports | 2 | High | Full team |

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 | 5 Days | 4 June 2025 | 9 June 2025 | 5 | 10 June 2025 |
| Sprint-2 | 6 | 5 Days | 10 June 2025 | 15 June 2025 | 6 | 15 June 2025 |
| Sprint-3 | 5 | 5 Days | 16 June 2025 | 21 June 2025 | 5 | 21 June 2025 |
| Sprint-4 | 5 | 5 Days | 22 June 2025 | 27 June 2025 | 5 | 27 June 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)

$$AV = \frac{\text{sprint duration}}{\text{velocity}} = \frac{20}{10} = 2$$