**Project Planning Phase**

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

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| --- | --- |
| Date | 20 July 2025 |
| Team ID | LTVIP2025TMID41443 |
| 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)**

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 | USN-1 | As a developer, I can collect images for all 4 disease classes and organize them into folders. | 2 | High | 2 |
| Sprint-1 |  | USN-2 | As a developer, I can load the image dataset into the training pipeline | 1 | High | 2 |
| Sprint-1 | Data Preprocessing | USN-3 | As a system, I can handle missing or corrupted images to ensure clean input for training. | 3 | Medium | 1 |
| Sprint-1 |  | USN-4 | As a developer, I can convert class labels to categorical format for model training. | 2 | Medium | 2 |
| Sprint-2 | |  | | --- | |  |  |  | | --- | | Model Development | | USN-5 | |  | | --- | |  |   As a system, I can classify poultry diseases using a trained transfer learning model | 5 | High | 1 |
| Sprint-2 |  | USN-6 | As a developer, I can validate model accuracy using accuracy score, confusion matrix, and graphs. | 3 | High | 2 |
| Sprint-2 | Deployment | USN-7 | As a user, I can access the HTML-based front-end for uploading images and viewing results. | 3 | |  | | --- | |  |  |  | | --- | | Medium | | 1 |
| Sprint-2 |  | USN-8 | As a developer, I can deploy the trained model using Flask backend for real-time predictions. | 5 | High | 3 |

**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 | 20 | 6 Days | |  | | --- | |  |   29 June 2025 | 4 July 2025 | 20 | 20 July 2025 |
| Sprint-2 | 20 | 6 Days | 5 July 2025 | 10 July 2025 | 20 | 20 July 2025 |
| Sprint-3 | 20 | 6 Days | 11 July 2025 | 16 July 2025 | 18 | 20 July 2025 |
| Sprint-4 | 20 | 6 Days | 17 July 2025 | 20 July 2025 | 16 | 20 July 2025 |
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**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)

**Total Story Points Completed = 74**  
**Number of Sprints = 4**

✅ **Velocity = 74 ÷ 4 = 18.5 story points per sprint**