**Project Planning Phase**

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

|  |  |
| --- | --- |
| Date | 25 june 2025 |
| Team ID | LTVIP2025TMID45798 |
| Project Name | Smart Sorting: Transfer Learning for Identifying Rotten Fruits and Vegetables |
| 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 Preparation | USN-1 | As a developer, I can clean and preprocess fruit and vegetable image datasets. | 3 | High |  |
| Sprint-1 | Model Training | USN-2 | As a developer, I can build and train the VGG16 model on the dataset. | 5 | High |  |
| Sprint-1 | Model Evaluation | USN-3 | As a developer, I can evaluate and fine-tune the model accuracy. | 3 | High |  |
| Sprint-2 | Flask Integration | USN-4 | As a developer, I can integrate the trained model into a Flask backend. | 4 | High |  |
| Sprint-2 | |  | | --- | | Frontend Development |  |  | | --- | |  | | USN-5 | As a user, I can upload images and see predictions via a clean frontend UI. | 4 | High |  |
| Sprint-2 | Prediction Logic | USN-6 | As a user, I can view the predicted class label and confidence after upload. | 3 | High |  |
| Sprint-3 | Testing | USN-7 | As a developer, I can test with multiple images for functional and UI testing. | 3 | High |  |
| Sprint-3 | Deployment | USN-8 | As a developer, I can deploy the app on local/cloud for public access. | 2 | Median |  |
| Sprint-3 | Documentation | USN-9 | As a developer, I can prepare documentation and a project report for submission. | 2 | Median |  |

**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 | 11 | 5 Days |  |  | 11 |  |
| Sprint-2 | 11 | 5 Days |  |  |  |  |
| Sprint-3 | 7 | 5 Days |  |  |  |  |

**Velocity:**

* **Team estimated velocity: ~11 story points per 5-day sprint.**
* **Tracks consistent progress in dataset preparation, model training, and Flask integration.**

**Burndown Chart:**

**The burndown chart for NutriGaze will track:**

* **Total story points vs. time for each sprint.**
* **Demonstrates how work reduces across each sprint.**

**You can generate this chart using:**

* **Google Sheets burndown template**
* **Jira burndown view**
* [**Visual Paradigm Burndown Chart**](https://www.visual-paradigm.com/scrum/scrum-burndown-chart/)

**References for Project Planning:**

* [**How to Do Scrum with Jira**](https://www.atlassian.com/agile/tutorials/how-to-do-scrum-with-jira-software)
* [**Agile Estimation**](https://www.atlassian.com/agile/project-management/estimation)
* [**Epics and Sprints**](https://www.atlassian.com/agile/tutorials/epics)
* [**Scrum Burndown Charts**](https://www.atlassian.com/agile/tutorials/burndown-charts)