Project Planning Phase

Date: 24 May 2025

Team ID: LTVIP2025TMID41465

Project Name: Smart Sorting - Transfer Learning for Identifying Rotten Fruits and Vegetables

Maximum Marks: 4 Marks

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

| **S.No** | **Sprint** | **Functional Requirement (Epic)** | **User Story Number** | **User Story / Task** | **Story Points** | **Priority** | **Sprint Start Date** | **Sprint End Date (Planned)** | **Story Points Completed** | **Sprint Release Date (Actual)** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1 | Sprint-1 | Model Development | USN-1 | Collect and label image dataset | 2 | High | 01 Jul 2025 | 05 Jul 2025 | 2 | 05 Jul 2025 |
| 2 | Sprint-1 | Model Development | USN-2 | Preprocess data (resize, augment, normalize) | 3 | High | 01 Jul 2025 | 05 Jul 2025 | 3 | 05 Jul 2025 |
| 3 | Sprint-1 | Model Development | USN-3 | Design model architecture (CNN or transfer learning) | 3 | High | 01 Jul 2025 | 05 Jul 2025 | 3 | 05 Jul 2025 |
| 4 | Sprint-1 | Model Development | USN-4 | Train and validate model | 3 | High | 01 Jul 2025 | 05 Jul 2025 | 3 | 05 Jul 2025 |
| 5 | Sprint-1 | Model Development | USN-5 | Save trained model to .h5 | 1 | Medium | 01 Jul 2025 | 05 Jul 2025 | 1 | 05 Jul 2025 |
| 6 | Sprint-2 | Streamlit App | USN-6 | Load model and test predictions in Streamlit | 2 | High | 06 Jul 2025 | 10 Jul 2025 | 2 | 10 Jul 2025 |
| 7 | Sprint-2 | Streamlit App | USN-7 | Implement image uploader and display | 3 | High | 06 Jul 2025 | 10 Jul 2025 | 3 | 10 Jul 2025 |
| 8 | Sprint-2 | Streamlit App | USN-8 | Preprocess uploaded image | 2 | Medium | 06 Jul 2025 | 10 Jul 2025 | 2 | 10 Jul 2025 |
| 9 | Sprint-2 | Streamlit App | USN-9 | Classify and show result using prediction | 2 | High | 06 Jul 2025 | 10 Jul 2025 | 2 | 10 Jul 2025 |
| 10 | Sprint-2 | Streamlit App | USN-10 | Style app with CSS and emojis | 3 | Medium | 06 Jul 2025 | 10 Jul 2025 | 3 | 10 Jul 2025 |
| 11 | Sprint-3 | Deployment & Optimization | USN-11 | Prepare GitHub repo with model and app | 2 | High | 11 Jul 2025 | 15 Jul 2025 | 2 | 15 Jul 2025 |
| 12 | Sprint-3 | Deployment & Optimization | USN-12 | Deploy to Streamlit Cloud | 3 | High | 11 Jul 2025 | 15 Jul 2025 | 3 | 15 Jul 2025 |
| 13 | Sprint-3 | Deployment & Optimization | USN-13 | Test across devices and fix bugs | 2 | Medium | 11 Jul 2025 | 15 Jul 2025 | 2 | 15 Jul 2025 |
| 14 | Sprint-3 | Deployment & Optimization | USN-14 | Add footer, branding, banners | 2 | Low | 11 Jul 2025 | 15 Jul 2025 | 2 | 15 Jul 2025 |
| 15 | Sprint-3 | Deployment & Optimization | USN-15 | Create README and documentation | 3 | Medium | 11 Jul 2025 | 15 Jul 2025 | 3 | 15 Jul 2025 |