**Initial Project Planning**

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| Date | 20 June 2025 |
| Team ID | SWTID1750180871 |
| Project Name | Mangonet: A Vgg16-Based Neural Network For Mango Classification |
| Maximum Marks | 4 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 Start Date** | **Sprint End Date (Planned)** |
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| Sprint-1 | Image Acquisition | USN-1 | As a user, I can capture or upload images of mangoes for classification | 2 | High | 3 | 15 June 2025 | 18 June 2025 |
| Sprint-1 | Preprocessing | USN-2 | As a user, I can preprocess mango images (resize, normalize) to prepare them for the neural network. | 2 | High | 3 | 18 June 2025 | 20 June 2025 |
| Sprint-1 | Model Integration | USN-3 | As a user, I can classify mango images using the VGG16-based Mangonet model to identify variety. | 3 | Low | 3 | 20 June 2025 | 23 June 2025 |
| Sprint-2 | Sorting & Packaging | USN-4 | As a farmer, I can automatically sort mangoes into categories ('Anwar Ratool', 'Chaunsa (Black)', 'Chaunsa (Summer Bahisht)', 'Chaunsa (White)', 'Dosehri', 'Fajri', 'Langra', 'Sindhri') for efficient packaging. | 2 | Medium | 3 | 23 June 2025 | 25 June 2025 |
| Sprint-2 | Grading & Display | USN-5 | As a vendor, I can categorize mangoes by appearance to display them attractively in the market. | 2 | Medium | 3 | 25 June 2025 | 27 June 2025 |
| Sprint-2 | Quality Control | USN-6 | As a quality manager, I can detect defects or foreign objects in mangoes during processing for quality control. | 3 | High | 3 | 27 June 2025 | 29 June 2025 |
| Sprint-2 | Reporting | USN-7 | As a user, I can generate reports on mango classification results for analysis and record-keeping | 1 | Low | 3 | 29 June 2025 | 30 June 2025 |