**Project Design Phase-II**

**Data Flow Diagram & User Stories**

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| Date | 26 June 2025 |
| Team ID | LTVIP2025TMID41465 |
| Project Name | Smart Sorting:Tranfer Learning for Identifying  rotten fruits and vegetables |
| Maximum Marks | 4 Marks |

**Data Flow Diagrams:**

A Data Flow Diagram (DFD) is a traditional visual representation of the information flows within a system. A neat and clear DFD can depict the right amount of the system requirement graphically. It shows how data enters and leaves the system, what changes the information, and where data is stored.

**Example: Smart Sorting System**

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│ External Devices │

│ (Cameras, Conveyor Belts) │

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│ Image Capture │

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│ Transfer Learning & │

│ Classification │

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│ Fresh Item │ │ Rotten Item│

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**User Stories:**

Use the below template to list all the user stories for the product.

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| --- | --- | --- | --- | --- | --- | --- |
| **User Type** | **Functional**  **Requirement (Epic)** | **User**  **Story Number** | **User Story / Task** | **Acceptance criteria** | **Priority** | **Release** |
| System Admin | Camera Setup & System  Initialization | USN-1 | As an admin, I can configure camera inputs and system parameters. | Cameras are connected and system starts  capturing images. | High | Sprint-1 |
| Operator | Image Classification &  Monitoring | USN-2 | As an operator, I can view real-time classification of produce. | System displays and sorts fresh/rotten  produce in real time. | High | Sprint-1 |
| Operator | Monitoring Results | USN-3 | As an operator, I can view logs of rotten and fresh counts per batch. | Operator sees log file or  report of classification counts | Medium | Sprint-2 |
| Retail Staff | Scan Incoming Shipments | USN-4 | As retail staff, I can scan incoming produce to detect any rotten items. | Rotten produce is flagged before shelf  stocking. | High | Sprint-2 |
| Home User | Smart Fridge Alerts | USN-5 | As a user, I receive alerts when fruits or vegetables in the fridge start rotting. | Notification sent to  mobile when item starts degrading. | Medium | Sprint-3 |
| Home User | App Notifications | USN-6 | As a user, I get suggestions on which  produce to consume first. | App shows list sorted by  spoilage detection. | Low | Sprint-3 |