Solution Requirements (Functional & Non-functional)

# Functional Requirements :

FR-1: Image Upload Interface  
 - Users can upload images of fruits/vegetables.  
 - Image validation and resizing.

FR-2: Model Prediction  
 - System analyzes image using transfer learning (VGG16).  
 - Returns 'Fresh' or 'Rotten'.

FR-3: Web Interface  
 - Result displayed on the Flask-powered web interface.  
 - Option to re-upload new images.

# Non-Functional Requirements :

NFR-1: Usability – Intuitive interface for non-technical users.

NFR-2: Performance – Fast response (<2s prediction).

NFR-3: Scalability – Can be deployed on cloud for high-volume sorting.

NFR-4: Availability – 24/7 accessible service if hosted online.

NFR-5: Reliability – High accuracy and consistent results.