Project Design Phase-II
Solution Requirements (Functional & Non-functional)

Date	26-05-2025
Team ID	
Project Name	DocSpot
Maximum Marks	4 Marks

Functional Requirements:

Following are the functional requirements of the proposed solution.

Functional Requirements – Music Streaming App

FR No.	Sub Requirement (Story / Sub-Task)
FR-1	The user shall be able to upload an image of a fruit or vegetable.
FR2	The system shall preprocess the image before prediction.
FR-3	The system shall classify the image as either **Fresh** or **Rotten** using the pre-trained VGG16 model.
FR-4	The result shall be displayed along with the uploaded image.
FR-5	The system shall provide feedback within a few seconds.
FR-6	Uploaded images shall be saved temporarily in a static folder for result rendering.

Non-functional Requirements:

Following are the non-functional requirements of the proposed solution.

NFR No.	Description

NFR-1	The system should have a clean and responsive user interface.
NFR-2	The system should deliver predictions with an average response time of < 3 seconds.
NFR-3	The model should maintain an accuracy of at least 90% on the validation dataset..
NFR-4	The system should be deployable on public platforms like Render.
NFR-5	The system should ensure 99.9% uptime with minimal downtime.
NFR-6	The application must be compatible with modern web browsers.

System Requirements

S.No Component	Details
SR-1 Programming Language	Python 3.10+
SR-2 Framework	Flask
SR-3 Model Format	.h5 (Keras / TensorFlow SavedModel)
SR-4 Libraries Used	TensorFlow, Keras, NumPy, Flask
SR-5 Frontend	HTML, CSS
SR-6 Deployment	Render (via GitHub repo)
SR-7 RAM/Memory (for local runs)	Minimum 4GB recommended