Date	**19 February 2026**
Team Id	**LTVIP2026TMIDS83873**
Project Name	**Smart-Sorting-Transfer-Learning-forIdentifying-Rotten-Fruits-and-Vegetables**
Maximum Marks	**4 marks**

Brainstorm & Idea Prioritization Template

Step 1: Team Gathering, Collaboration, and Select the Problem Statement

Manual sorting of fruits and vegetables in food industries and supermarkets is timeconsuming, error-prone, and labor-intensive. There is a need for an automated, intelligent solution that can identify and remove rotten produce using image classification.

Objective:

Build a deep learning–based web application that uses transfer learning (VGG16) to classify fruits and vegetables as Fresh or Rotten, and provide real-time predictions via an intuitive UI.

Step 2: Brainstorm, Idea Listing and Grouping

Idea / Feature	**Group / Category**
Use transfer learning for fast model	AI / Deep Learning training
Integrate model into a Flask web app	Backend / Web Application
Upload interface for images	Frontend / UI

Provide prediction as "Fresh" or "Rotten"	Model Output / UI
Use pre-trained VGG16 model	Deep Learning Model
Train on publicly available dataset (Kaggle)	Dataset
Create a demo video and user flow	Documentation / Presentation
Future enhancement: mobile app	Scalability / Roadmap integration
Smart home fridge alert system	Use Case / Smart Home
Automate sorting in food industries	Use Case / Industrial

Step 3: Idea Prioritization

Priority Level	Idea / Feature	Why?
High	Upload → Predict → Show Result flow	Core functionality
High	Use VGG16 and transfer learning	Fast, efficient training
Medium	Build for Render deployment	Optional, but useful
Medium	Add Google Drive model backup	To avoid large file uploads
Low	Add real-time camera prediction	Advanced feature for future
Low	Smart fridge integration	For smart home use case
Medium	Create demo script & README.md	Required for presentation
High	Dataset grouping into Fresh/Rotten	Directly affects accuracy