Date	17 February 2026
Team ID	LTVIP2026TMIDS91602
Project Name	Smartsorting
Maximum Marks	4 Marks

Solution Architecture:

Architecture Overview

1. Client (Browser)

   o HTML/CSS/JS pages (index, predict, result, etc.)

   o   User selects "Predict," uploads an image.

2. Web Server (Flask App)

   o   app.py routes:

      □   / → serves index.html
          /predict → accepts upload, saves image
      □

   o   Preprocessing: rescale & resize to 224×224

   o   Inference: loads fruit_classifier_model_v5.h5, runs model.predict()

3. Model (VGG16 + Top Layers)

   o   Pre-trained backbone (blocks 1–5) + custom dense layers

   o   Outputs 29-class softmax probabilities

4. Response & Presentation

   o   Flask returns result.html with predicted label

   o   Client displays result box (green/yellow)

Example - Solution Architecture Diagram:

Prediction

UI

Model

Inputs

User

Evaluation

DL Algorithm

Train Data

Test Data

Image
Preprocessing

Images