Model Development Phase Template

Date	23April 2024
Team ID	**738194**
Project Title	RIPE-SENSE: MANGO QUALITY GRADING WITH IMAGE ANALYSIS AND DEEP LEARNING.
Maximum Marks	5 Marks

Model Selection Report

In the model selection report for future deep learning and computer vision projects, various architectures, such as CNNs or RNNs, will be evaluated. Factors such as performance, complexity, and computational requirements will be considered to determine the most suitable model for the task at hand.

Model Selection Report:

Model	Description

CNN(VGG16)	**VGG16:**
	• **Type:** Convolution Neural Network (CNN)
	• **Strengths:**
	  ○ High accuracy (proven performer)
	  ○ Relatively simple and well-understood architecture
	• **Weaknesses:**
	  ○ Computationally expensive (large number of layers)
	  ○ Less flexible compared to custom/sequential CNNs

CNN (Sequential)	Sequential : · **Type:** Convolutional Neural Network (CNN) · **Strengths:**

	• Potentially more efficient (tailored architecture) • Can be adapted to specific tasks and datasets · **Weaknesses:** • Requires careful design and hyperparameter tuning (not guaranteed success) • Performance might be lower than VGG16 depending on design