Model Development Phase Template

Date	15 March 2024
Team ID	SWTID1720027196
Project Title	Greenclassify: Deep Learning-Based Approach For Vegetable Image Classification
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
Model 1	**Convolutional Neural Networks (CNNs):** • **Performance:** CNNs are highly effective for image-related tasks such as image classification, object detection, and segmentation due to their ability to capture spatial hierarchies. • **Complexity:** CNNs can range from simple architectures (e.g., LeNet) to very complex ones (e.g., ResNet, Inception), with depth and width affecting their capacity and performance. • **Computational Requirements:** CNNs can be computationally intensive, requiring significant GPU resources, especially for deep networks. Techniques like transfer learning can help mitigate these requirements.