Model Development Phase Template

Date	15 June 2025
Team ID	SWTID1750006853
Project Title	ASL- Alphabet Image Recognition
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: Custom CNN	A baseline convolutional neural network designed with multiple convolutional and pooling layers, followed by dense layers. While simpler and lightweight, it achieved lower accuracy and required careful tuning to avoid overfitting.
Model 2: VGG16 (Transfer Learning)	A pretrained convolutional neural network from the ImageNet dataset. Only the top layers are fine-tuned. Chosen for its proven performance in image classification tasks. Achieved high accuracy with faster convergence and reduced training time.