



## **Model Development Phase Template**

Date	17th June 2025
Team ID	SWTID1749740962
Project Title	Dog Breed Identification Using Transfer 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
Model 1	Convolutional Neural Networks (CNNs) have revolutionized image classification tasks, making them the go to choose for tasks like dog breed identification. In this scenario, transfer learning, a technique where a pre-trained model's knowledge is transferred and fine-tuned to a new task, is employed due to its effectiveness in leveraging existing large-scale datasets and computational resources.
Model 2	VGG19 is a deep convolutional neural network architecture that has shown remarkable performance in image classification tasks. It consists of 19 layers, including convolutional layers with small 3x3 filters and max-pooling layers.





	VGG19 is widely used for transfer learning due to its simplicity and effectiveness in extracting hierarchical features from images
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