Model Development Phase Template

Date	19 July 2024
Team ID	SWTID1720627211
Project Title	Cognitive Care: Early Intervention for Alzheimer's Disease
Maximum Marks	6 Marks

Model Selection Report

In the model selection report for upcoming deep learning and computer vision projects, different architectures, including CNNs and RNNs, will be assessed. The evaluation will consider factors like performance, complexity, and computational demands to identify the most appropriate model for the specific task.

Model Selection Report:

Model	Description	Hyperparameters	Performance Metric (e.g., Accuracy, F1 Score)
Xception	The Xception model is a deep learning architecture for image classification that uses depthwise separable convolutions to reduce parameters and computational cost. It extends the Inception architecture by enhancing efficiency and accuracy. "Xception" stands for "Extreme Inception," indicating its advanced design.	Dropout Rate, Global Avg Pooling, Batch Normalization, Activation Functions, Learning Rates, Loss Function.	val_accuracy: 0.6004

Vgg19	The VGG19 model is a deep convolutional neural network with 19 layers, known for its simplicity and small (3x3) convolution filters. It is highly accurate in image classification tasks and performed well in the 2014 ImageNet Challenge.	Learning Rate, Batch Size, Optimizer, Activation Function, Dropout Function	val_accuracy: 0.2508
Inception V3	Inception V3 is a deep learning model for image classification that uses multi-scale convolutions and pooling within its Inception modules to efficiently capture features. It is known for its accuracy and computational efficiency.	Dropout Rate, Learning Rate, Activation Function, Weight Initialization	val_accuracy: 0.2495