Model Development Phase Template

Date	5 November 2024
Team ID	SWTID1726832093
Project Title	Analysis of Amazon Cell Phone Reviews Using NLP Technique
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
Embedding Layer	The Embedding layer is used to convert each word in the input text into a dense vector of fixed size (128 in this case). This layer learns the word embeddings during training. `accuracy: 0.8379 - loss: 0.3608 - val_accuracy: 0.9098 - val_loss: 0.2120`
LSTM Layers:	LSTM (Long Short-Term Memory) is a type of RNN that is particularly good at learning dependencies over long sequences of text, which is crucial for understanding context in review `- accuracy: 0.9128 - loss: 0.2127 - val_accuracy: 0.9098 - val_loss: 0.2276`

Dense Layer:	The final Dense layer has a single neuron with a sigmoid activation function. This is used for binary classification (e.g., predicting whether a review's sentiment is positive or negative based on the rating).