Model Development Phase Template

Date	24 April 2024
Team ID	739877
Project Title	Crystal Ball Analysis: Projecting Share Prices Of The Leading Gpu Titans
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.

  A model selection report outlines the process of evaluating and choosing the most suitable machine learning model for a specific task, detailing criteria such as performance metrics, computational efficiency, interpretability, and suitability for the dataset's characteristics to justify the final model choice.

Model Selection Report:

Model	Description
Linear Regression	Linear Regression is a suitable choice for projecting share prices of leading GPU companies in the "Crystal Ball Analysis: Projecting Share Prices Of The Leading GPU Titans" project. It offers simplicity and interpretability, modeling the linear relationship between share prices (dependent variable) and factors such as market trends, financial indicators, and company performance metrics (independent variables). Linear Regression can effectively handle both numerical and categorical features relevant to GPU market analysis. It provides insights into the quantitative impact of each predictor on share prices, helping to identify influential factors such as market demand, technological advancements, and competitive positioning of GPU companies.
Decision TreeClassifier	Decision Tree is a supervised learning algorithm used for both classification and regression tasks. It creates a model that predicts the value of a target variable by learning simple decision rules inferred from the data features. Decision Tree splits the dataset into subsets based on the most significant attribute at each node, optimizing for purity (e.g., Gini impurity or entropy). Each internal node represents a "decision" based on a feature, and each leaf node represents the outcome (class label) after following the decision path from the root.