

Model Development Phase Template

Date	17 July 2024
Project Title	Machine learning approach for predicting the price of natural gas
Maximum Marks	6 Marks

Model Selection Report

In the forthcoming Model Selection Report, various models will be outlined, detailing their descriptions, hyperparameters, and performance metrics, including Accuracy or F1 Score. This comprehensive report will provide insights into the chosen models and their effectiveness.

Model Selection Report:

Model	Description	Hyperparameters	Performance Metric (e.g., Accuracy, F1 Score)
Linear Regression	A linear approach to modeling the relationship between the target variable and its predictors.	- fit_intercept=True - normalize=False (deprecated)	R ² Score: 0.022
Decision Tree Regression	A decision tree algorithm that splits the data into subsets based on the value of the input features.	- criterion='squared_error' - splitter='best' - max_depth=None - min_samples_split=2 - min_samples_leaf=1 - max_features=None	R ² Score: 0.9875