

## Model Development Phase Template

### Model Selection Report

Date	15 july 2024
Team ID	739714
Project Title	Price prediction of natural gas using machine approach.
Maximum Marks	6 Marks

### Model Development Phase Template

			<b>Performance Metric (e.g., Accuracy, F1 Score)</b>
<b>Model</b>	<b>Description</b>	<b>Hyperparameters</b>	
Decision Tree	Simple tree structure; interpretable, captures non-linear relationships, suitable for initial insights into price prediction patterns.	-	Accuracy score = 98%
Random Forest	Ensemble of decision trees; robust, handles complex relationships, reduces overfitting, and provides feature importance for price prediction.	-	Accuracy score = 80%
Gradient Boosting	Gradient boosting with trees; optimizes predictive performance, handles complex relationships, and is suitable for accurate loan approval predictions.	-	Accuracy score = 79%