Model Development Phase Template

	Description		Performance Metric (e.g., Accuracy, F1 Score)
Model	A statistical model that predicts the probability of a binary outcome.	Hyperparameters	

Logistic Regression		-	Accuracy = 94%
Decision Tree	Simple tree structure, interpretable, captures nonlinear relationships, suitable for initial insights into landing success patterns.	-	Accuracy = 94%

Date	15 July 2024
Team ID	739760
Project Title	Space X Falcon 9 First Stage Landing Success Predictor
Maximum Marks	6 Marks

| K-Nearest Neighbors (KNN) | Classifies based on nearest Neighbors,adapts well to data patterns, effective for local variations in landing success criteria. | - | Accuracy = 94% |

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:

Random Forest	Ensemble of decision trees; robust, handles complex relationships, reduces overfitting, and provides feature importance for landing success prediction.	-	Accuracy = 94%