Model Development Phase Template

Date	15 March 2024
Team ID	LTVIP2024TMID24986
Project Title	Movie Box Office Gross Prediction using Machine Learning
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 Metrics (R^2, MSE, MAE)
Linear Regression	A simple linear model to predict box office revenue.	-	R^2: 0.7758, MSE: 8649.14, MAE: 54.377
Decision Tree Regressor	Non-linear model using decision trees for predictions.	-	R^2: 0.5318, MSE: 18060.04, MAE: 73.851
SVM Regression	Non-linear regression model using support vector machines.	-	R^2: 0.1528, MSE: 32681.37, MAE: 77.861

Random Forest Regressor	Ensemble model using multiple decision trees.	-	R^2: 0.7617, MSE: 9190.28, MAE: 50.225