Model Development Phase Template

Date	08 July 2024
Team ID	team-739875
Project Title	House Rent Price 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 Metric (e.g., Accuracy, F1 Score)
Linear Regression	Linear regression is a statistical method used to model and analyze the relationship between a dependent variable and one or more independent variables. The main goal of linear regression	-	Accuracy score=81.3%

	is to predict the value of the dependent variable based on the values of the independent variables.		
Random Forest	A Random Forest Regressor is an ensemble learning method used for regression tasks that builds multiple decision trees and merges their predictions to improve accuracy and control over-fitting.	-	Accuracy score=98.6%
XGBoost Regression	The XGBoost Regressor is an advanced ensemble learning technique based on gradient boosting that is widely used for regression tasks due to its high performance and efficiency.	-	Accuracy score=91.6%

| Decision Tree | Decision tree has a hierarchical tree structure consisting of a root node, branches, internal nodes, and leaf nodes. Decision trees are used for classification and regression tasks, providing easy-to-understand models. | - | Accuracy score=99.6% |