Model Development Phase Template

Date	10 July 2024
Team ID	739894
Project Title	Predicting Compressive Strength of Concrete
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)
Linear Regression	Linear regression is a statistical method used to model the relationship between a dependent variable and one or more independent variables . The goal of linear regression is to find the best-fitting line that describes how the dependent variable changes as the independent variables change.	No hyperparameters used	Accuracy:74.5933 0.745933
Gradient Boosting Regressor	Gradient boosting regressor is an ensemble learning method that builds models sequentially, with each model correcting the errors of its predecessor. It uses decision trees as base estimators and employs gradient descent to minimize a loss function. This approach effectively improves prediction accuracy for continuous output variables.	No hyperparameters used	Accuracy:0.88931 88.931