Model Development Phase Template

Date	14 July 2024
Team ID	740073
Project Title	Exploratory Analysis of Rain Fall Data in India for Agriculture
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	Description	Hyperparameters	Performance Metric (e.g., Accuracy, F1 Score)
Random Forest	This analysis uses a Random Forest algorithm, a robust machine learning technique, to explore and understand the rainfall data in India..	-	Accuracy score = 99%

Decision Tree	This analysis leverages Decision Tree algorithms to explore and analyze rainfall data in India, providing insights that can aid farmers, policymakers, and agricultural scientists..	-	Accuracy score = 100%
log	This analysis uses Logistic Regression, a powerful statistical method, to explore rainfall data and understand its impact on agriculture.	-	Accuracy score = 83%
XGboost	This analysis employs XGboost (Extreme Gradient Boosting), a powerful machine learning algorithm, to explore and analyze rainfall data in India, providing insights that can be crucial for various stakeholders in agriculture..	-	Accuracy score = 84%
Gradient Boosting	This analysis uses Gradient Boosting Machine (GBM), a powerful ensemble learning algorithm, to explore rainfall data and derive insights that can benefit farmers, policymakers, and agricultural scientists.	-	Accuracy score = 84%