Model Development Phase Template

Date	15 July 2024
Team ID	739750
Project Title	Doctors Annual Salary Prediction
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)**
Linear Regression	The project aims to model and analyze the relationship between [dependent variable] and [independent variable(s)] using linear regression.	-	Accuracy score = 67%

Random Forest	Ensemble of decision trees; robust, handles complex relationships, reduces overfitting, and provides feature importance for loan approval prediction.	-	Accuracy score = 89%
Decision Tree	Simple tree structure; interpretable, captures non-linear relationships, suitable for initial insights into loan approval patterns.	-	Accuracy score = 100%
XGB Regressor	XGBRegressor is a regression implementation in the XGBoost library, which stands for Extreme Gradient Boosting. It is designed for supervised learning tasks and is known for its efficiency, speed, and performance. XGBoost combines the predictions of multiple decision trees to produce a more accurate and robust mode	-	Accuracy score = 99%