Model Development Phase Template

Date	14th July 2024
Team ID	SWTID1720090815
Project Title	Early Prediction Of Chronic Kidney Disease Using Machine Learning
Maximum Marks	6 Marks

Model Selection Report

This comprehensive model selection report will provide insights into the chosen models and their effectiveness.

Model Selection Report:

Model	Description	Hyper -parameters	Accuracy and Recall
Random Forest Classifier	Random Forest is known for its ability to handle complex relationships and provide high accuracy. It is also less prone to overfitting compared to other models.	-	Accuracy: 95.00% Recall: 88.88%
Logistic Regression	This model is easy to understand the coefficients associated with each feature, providing insights into their impact on the prediction. Besides that, it is suitable for binary classification.	-	Accuracy: 92.50% Recall: 94.44%

Decision Tree Classifier	Decision Trees are highly interpretable, making it easier to understand which features are most influential for the prediction. It is however prone to overfitting.	-	Accuracy: 94.16% Recall: 86.11%
XGBoost Classifier	XGBoost is known for its high accuracy and ability to handle complex datasets. It can often outperform other models, especially for challenging tasks. This model is suitable for large datasets.	-	Accuracy: 92.50 % Recall:88.88%