Model Development Phase Template

Date	29 June 2024
Team ID	SWTID1720447482
Project Title	Thyroid Classification
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.

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Model Selection Report:

Model	Description	Hyperparameters	Performance Metric (e.g., Accuracy, F1 Score)
Random Forest Classifier	An ensemble learning method thatconstructs multiple decision trees and merges them to get amore accurate and stable prediction.	'max_depth': None, 'n_estimators': 300	0.9420
XGB Classifier	An optimized distributed gradient boosting library designed to be highly efficient, flexible, and portable,often used for structured data.	'learning_rate': 0.3, 'max_depth': 3, 'n_estimators': 100	0.953125

| Support Vector Classifier | A supervised learning model usedfor classification and regressionanalysis by finding the hyperplane that best separates the data into classes. | 'C': 100, 'gamma': 'scale', 'kernel': 'linear' | 0.8660714 |