Model Development Phase Template

Date	12 july 2024
Team ID	SWTID1720067156
Project Title	Lymphography Classification Tool
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
Random Forest	Ensemble of decision trees; robust, handles complex relationships, reduces overfitting, and provides feature importance for lymphography classification.	-	Accuracy = 83%
Decision Tree	Simple tree structure; interpretable, captures non-linear relationships, suitable for initial insights into lymphography patterns.	-	Accuracy = 83%
KNN	Classifies based on nearest neighbors; adapts well to data patterns, effective for local variations in lymphography criteria.	-	Accuracy = 80%
Gradient Boosting	Gradient boosting with trees; optimizes predictive performance, handles complex relationships, and is suitable for accurate lymphography predictions.	-	Accuracy = 82%