Model Development Phase Template

Date	18 June 2024
Team ID	SWTID1720112707
Project Title	Anemia Sense: Leveraging Machine Learning For Precise Anemia Recognitions
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 (e.g., Accuracy, F1 Score)
Logistic Regression	A linear model used for binary classification tasks.	C=1.0, class_weight='balanced', solver='liblinear'	Accuracy: 0.99, F1 Score: 1.00
Random Forest	An ensemble method using multiple decision trees.	n_estimators=100, random_state=42	Accuracy: 1.00, F1 Score: 1.00
Decision Tree	A model using a tree-like structure for decisions.	random_state=42	Accuracy: 1.00, F1 Score: 1.00

Naive Bayes	A probabilistic classifier based on Bayes' theorem.	None (default parameters)	Accuracy: 0.97, F1 Score: 0.98
Support Vector Classifier (SVC)	A classifier using hyperplanes to separate classes.	kernel='rbf', random_state=42	Accuracy: 0.99, F1 Score: 0.99
Gradient Boosting Classifier	An ensemble method that builds trees sequentially.	n_estimators=100, random_state=42	Accuracy: 1.00, F1 Score: 1.00