Model Development Phase Template

Date	16 July 2024
Team ID	SWUID20240029569
Project Title	Detection of Autistic Spectrum Disorder: 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.

Model Selection Report:

Model	Description	Hyperparameters	Performance Metric (e.g., Accuracy, F1 Score)
Random Forest	Ensemble of decision trees ;robust, handles complex relationships ,reduces overfitting,andprovides feature importance for disorder prediction	n_estimators, max_depth, max_features	Accuracy score = 100%
Decision Tree	Simple tree structure; ,interpretable, captures non-	Criterion, splitter, splitter	Accuracy score = 100%

	linear relationships, suitable for initial insights into disorder approval patterns.		
KNN	**Classifies based on nearestneighbors; adapts well to data patterns, effective**	n_neighbors, weights, metric	**Accuracy score = 96.17**