Model Development Phase Template

Date	10 July 2024
Team ID	740021
Project Title	Sepsis Survival Minimal Clinical Records
Maximum Marks	6 Marks

Model Selection Report

In the forthcoming Model Selection Report for sepsis survival prediction using minimal clinical records, various models will be outlined, detailing their descriptions, hyperparameters, including Accuracy or F1 score. This comprehensive report will provide insights into the chosen models and their effectiveness.

Model	Description	Hyperparameters	Performance metric(Accuracy)

Random Forest	Ensemble of decision trees; robust ,handles complex relationships, reduces overfitting, and provides feature importance for sepsis survival prediction	-	Accuracy = 89%
Decision Tree	Simple tree structure; interpretable, captures non-linear relationships, suitable for initial insights into sepsis survival patterns.	-	Accuracy = 89%
KNN	Classifies based on nearest neighbors; adapts well to data patterns, effective for sepsis survival prediction.	-	Accuracy = 88%

Logistic Regression	Used to model the relationship between a binary dependent variable and one or more independent variable	-	Accuracy = 89%