

## Model Development Phase Template

Date	10 July 2024
Team ID	865503
Project Title	Frappe Acθvity:Mobile Phone Acθvity Classificaθon
Maximum Marks	6 Marks

## Model Selecθon Report

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

Model	Descripθon	Hyperparameters	Performance metric(Accuracy)
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Random Forest	Ensemble of decision trees; robust ,handles complex relationships, reduces overfitting, and provides feature importance for sepsis survival prediction	-	Accuracy = 60%
Decision Tree	Simple tree structure; interpretable, captures non-linear relationships, suitable for initial insights into sepsis survival patterns.	-	Accuracy = 63%
Bagging Classifier	ensemble method that combines multiple base models trained on random subsets of the data to improve stability and accuracy. It reduces variance and prevents overfitting by aggregating predictions, typically using methods like majority voting.	-	Accuracy = 60%