

## Model Development Phase Template

Date	July 5,2024
Team ID	739892
Project Title	Customer segmentation using Machine Learning
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, and provides feature importance for customer segmentation prediction.	-	Accuracy score= 100%
Decision tree	Simple tree structure; interpretable, captures non-linear relationships, suitable for initial insights into customer segmentation.	-	Accuracy score= 100%

Extreme Gradient boosting	XGBoost builds a predictive model by combining the prediction of multiple individual models.	-	Accuracy score= 100%
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