Model Development Phase Template

Date	14-07-2024
Team ID	740669
Project Title	Customer Shopping Segmentation by 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	Description	Hyperparameters	Performance Metric (e.g., Accuracy, F1 Score)
KMeans	Clustering algorithm that partitions data into K clusters; effective for identifying distinct customer segments based on shopping behavior.	n_clusters=5	Accuracy score = 85%

Decision Tree	Simple tree structure; interpretable, captures non-linear relationships, suitable for initial insights into customer shopping patterns.	-	Accuracy score = 85%
KNN	Classifies based on nearest neighbors; adapts well to data patterns, effective for customer segmentation.	-	Accuracy score = 100%