

## Model Development Phase Template

Date	15 July 2024
Team ID	739816
Project Title	Market Segmentation analysis
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	Hyper parameters	Performance Metric (e.g., Accuracy, F1 Score)
Kmeans Clustering	K-means clustering is an unsupervised machine learning algorithm that partitions a dataset into K distinct clusters by iteratively assigning data points to the nearest of K randomly initialized centroids and updating the centroids to the mean of their assigned points. This process repeats until the centroids stabilize or a maximum number of iterations is reached, effectively grouping similar data points together by minimizing intra-cluster variance and maximizing inter-cluster variance. It's widely used for tasks like market segmentation, image compression, and pattern recognition.	-	-

