**Analyzing customer behavior and segment customers**

**Team Members:**

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**Technical Details**

In this project we solved an unsupervised learning problem (clustering), the goal is to cluster customer behavior. We used preprocessing techniques to handle the missing data, Scaling, Visualization and Modeling by using K-Means.

**Dataset**

We used a data from Kaggle platform:  <https://www.kaggle.com/datasets/bhuviranga/customer-segmentation/data>

The data contains 10695 rows and 12 columns:

Unamed: 0 contains random numbers was dropped

ID contains customer ID was dropped

Gender contains male and female

Ever\_Married contains yes or no

Age contains the age of customers

Graduated contains yes or no

Profession contains the specialization of customers

Work\_Experience contains the experience level

Spending Score contains the spending score

Family\_Size contains family members number

Var\_1 Anonymous category for customer

Segmentation was dropped

**Members Responsibilities**

Khaled: was responsible for Data conversion, Scaling and visualization.

Abdallah: was responsible for preprocessing the data.

Ali: was responsible for modeling and clustering.

**blog:** <https://github.com/3lialhaj/Customer-Behavior>