

Customer Segmentation

Shaima Alharbi



Customer segmentation:

is the practice of dividing a customers
into groups **based on** :

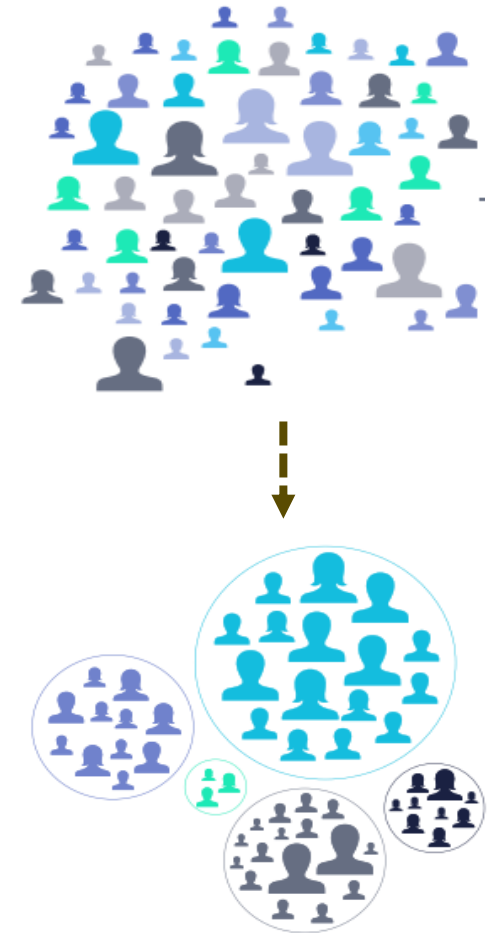
- Age
- Gender
- interests
- spending habits.





Benefit of Customer segmentation

In this project I will apply the idea by classify the customers into four segmentations (A,B,C,D) based on Age, work experience ,etc.

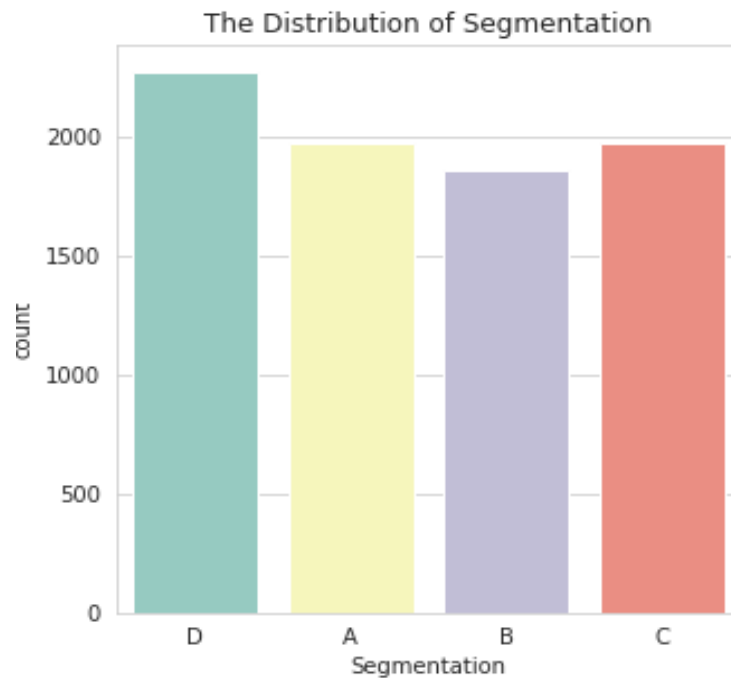


Process:

1

Exploratory Data Analysis (EDA)

- Analytic the data.
- Data Cleaning.
- Visualization between features and Segmentation(target)



Process:

1

Exploratory Data Analysis (EDA)

At the end of EDA I noticed the different of Segmentation A,B,C and D

Process:

2

Extract Features

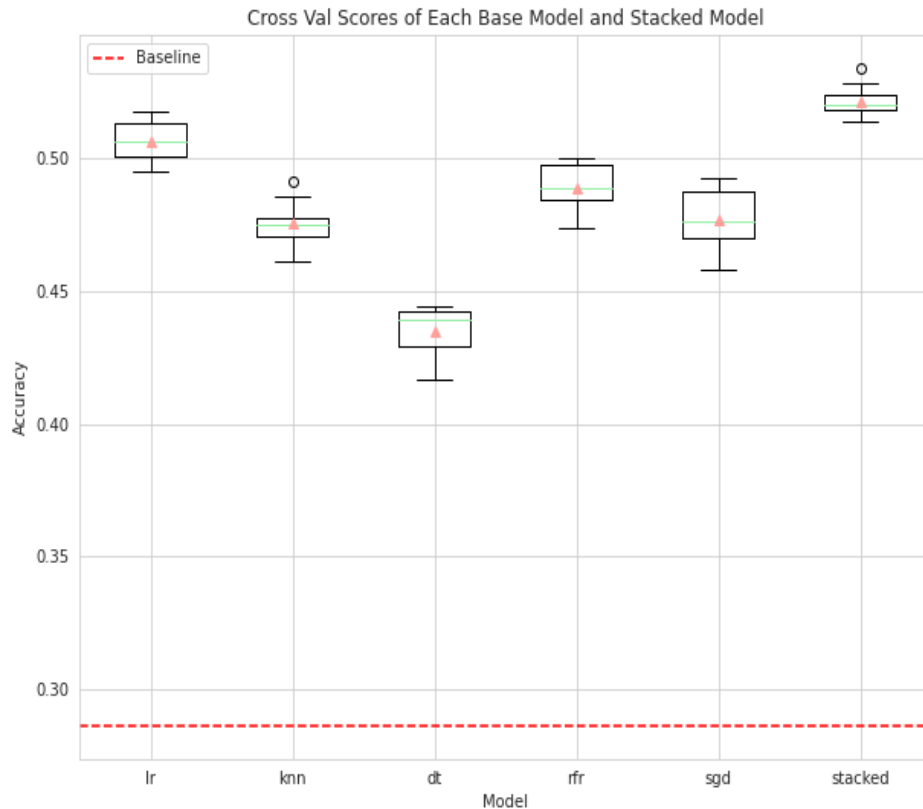
- Categorical Features:
- Derived Features.

Process:

3

Data Modlling

- Scale Data
- Split the data.
- Baseline Model
- Build Classifications models:
(Logistic Regression,
Decision Tree, Random
Forest, KNN ,SGD, Stacking)



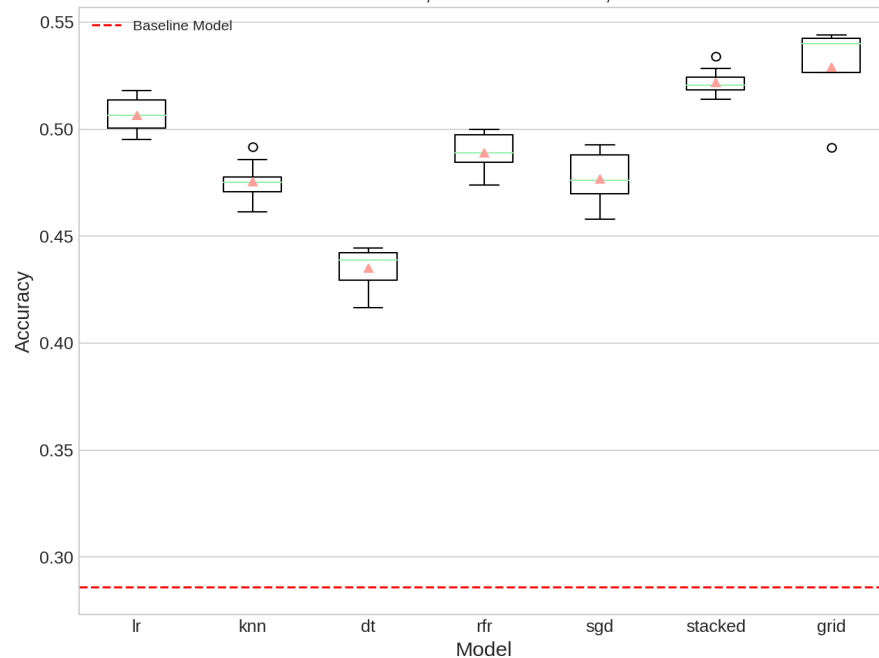
Process:

6

Optimizing the Model:

- optimizing the Stacking model

Cross Val Scores of Each Base Model, Stacked Model, and Best Tuned Stacked Model



Tech used:



seaborn



matplotlib



NumPy



pandas

Thank you for
listening



Github:

