

# PROJECT REPORT

## CUSTOMER SEGMENTATIONS

Prepared by: Muhammad Ahmed Naeem

### APPROACH

EDA: Created visualizations and use exploratory data analysis to remove duplicated and check data frame results

- Algorithm: K-Means (chose K=5 using the Elbow Method).
- Feature Selection: Used Annual Income and Spending Score as key variables.

Visualization:

- Scatter plots with clusters colored

### CHALLENGES FACED:

The main issue was to find stable silhouette score using visualisations

### TECHNIQUES AND IMPROVEMENTS:

- Use Optimal Number Of clusters to find silhoutte score
- Using elbow method to determine behaviour of model through visualisation