# **Customer Shopping Dataset**

#### **Third Team**

#### **TEAM MEMBERS:**

- 1. Charan Reddy Tamma
- 2. Pranideep Reddy Meka
- 3. Rakesh Venigalla
- 4. Phani Vishnu Addepalli

### Description:

The Istanbul Shopping Dataset comprises 99458 records from ten malls in Istanbul (2021-2023), featuring invoice numbers, client IDs, demographics, payment methods, and product details. It is a valuable resource for understanding consumer behavior and decision-making in Istanbul's retail scene.

#### *Introduction:*

In the modeling phase, we leverage our comprehensive EDA of the Istanbul customer dataset to analyze the total purchase values from 2021 to present. Statistical models will help uncover patterns, draw conclusions, and forecast future trends in the retail dataset.

## Goal:

The project aims to build robust **Regression models** for SMART questions based on exploratory data analysis. These models will explain historical economic behaviors and predict future trends in retail payments, providing actionable insights for economic strategists in shopping malls.

#### **Smart Questions:**

- 1. Does the total purchase amount affect the payment method?
- 2. Is there a correlation between a customer's age and gender effect on shopping behavior?
- 3. Does the shopping mall location affect the purchase frequency?
- 4. Are certain product categories associated with higher total purchase amounts than others?

## Dataset Link:

https://www.kaggle.com/code/mostafaabdelbadie/customer-shopping-dataset-retail-sales-dataeda/input

## GitHub Repository:

https://github.com/Rakeshvenigalla/third-team.git