

# Customer Behavior Prediction

## Team Members:

- 1- Mohamed Mohsen
- 2- Mariam Mohsen
- 3- Fatma Mohamed
- 4- Hisham Mohamed
- 5- Amira Kamel

## Project Idea and Description:

A **recommender system** designed to predict and suggest relevant items (products, movies, articles, etc.) to users based on their preferences, behaviors, and interactions. These systems enhance user experience by filtering large volumes of data and delivering personalized content.

## Technologies:

- Programming Language: Python
- ML Libraries and Frameworks: Scikit-learn
- Model Deployment and API: Fast API, Flask.
- Cloud Service and Infrastructure: Azure Machine Learning

## Planning And Roles:

- 1- Fatma Mohamed: Data Mining and cleaning
- 2- Mariam Mohsen: Data Mining and cleaning
- 3- Mohamed Mohsen: Feature Engineering and Data Exploration
- 4- Amira Kamel: ML Algorithms
- 5- Hisham Mohamed: Modeling Deployment

## Functional requirements:

- Data Collection & Processing
- Make prediction for customer behaviors
- Recommendation Generation
- Model Training & Evaluation
- Recommendation Delivery & Personalization

## Non-Functional Requirements:

- Scalability
- Performance
- Reporting & Analytics