FAIPL Assignment 1

Overview:

In this assignment, you will apply K-means clustering to analyze and segment customer orders for a logistics operation. This project simulates a real-world scenario where a growing e-commerce company needs to optimize its logistics operations through data-driven decision making.

Task:

Using the provided dataset, apply K-means clustering to group customer orders based on their priority and importance.

Dataset Description:

This dataset focuses on order characteristics that can help prioritize and assess the importance of each order. The features are:

1. Order Quantity: Number of units in each order.

2. Order Value: Total monetary value of the order in Euro.

3. Distance to Warehouse: Distance from the warehouse to the customer in kilometers.

4. Delivery Time: Expected delivery time in days.

5. Time to Due Date: Days remaining until the due date.

Deliverables:

Jupyter notebook (.ipynb file) with K-Means clustering algorithm adapted to the given dataset

Note: adjust the exercise file to the new dataset

Submission:

Upload Jupyter notebook (.ipynb file) in E-Learning

Deadline:

20.11.2025 11.00 CET