HUMBER

Graduate Certificate in Artificial Intelligence with Machine Learning
AIGC 5503 – AI For Bus. Decision Making

Assignment 1

Due Date: July 8th, 2025 11:59 PM

Submission guidelines:
- Submit a copy of your Python code (Jupyter Notebook file format).
- Submit a copy of your presentation slide. (PowerPoint or PDF file format)

Assignment Description:

In this assignment, you will analyze customer transaction data for your business to gather insight into your customers.

Your task is to:

- Understand the customer transaction dataset
- Preprocess the Data
- Build an RFM Model
- Perform K-Mean Clustering Analysis
- Create Customer Segmentation
- Analyze individual customer segments

Assignment Task:

1. Implement the analysis models in Python (Complete Task in Assignment 1.ipynb)
2. Prepare 3-6 Presentation slide on main insights gather from each Customer Segment (Task 4)

Evaluation:

- **Data Preprocessing – 10 %**
- **Implementation of RFM Model – 30%**
- **K-Means Clustering Analysis – 30%**
- **Customer Segmentation and Analysis – 30% (20% Code, 10% Presentation)**

Enjoy!