**Customer Shopping Trends Dataset**

The George Washington University (DATS 6103: An Introduction to Data Mining )

**TEAM 1**

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Description of the dataset:

In today’s evolving retail landscape, businesses are in constant pursuit of understanding consumer behavior to tailor their offerings and gain a competitive advantage. Likewise, consumers are becoming increasingly selective, valuing personalized experiences and choices in their shopping journeys. Understanding what affects shopping choices is essential for both businesses and consumers. The core of the challenge lies in the myriad factors influencing purchasing decisions, such as age, gender, geographical location, product preferences, and more.

To address this challenge, this research proposal emphasizes the use of the "Customer Shopping Preferences Dataset." This synthetic dataset, specifically designed for beginners delving into Data Analysis and Machine Learning, provides invaluable insights into consumer behavior and purchasing patterns. With 3,900 records, it captures vital customer attributes like age, gender, purchase history, preferred payment methods, frequency of purchases, and many others. By analyzing this dataset, we aim to enhance businesses' understanding of their customer base, shedding light on crucial factors such as items bought, shopping frequency, preferred shopping seasons, and interactions with promotional offers. The goal is to empower businesses with data-driven strategies that align with customer needs and preferences, ensuring optimized product offerings and elevated customer satisfaction.

Smart Questions:

1. Which factors (such as customer age, item category, location) have the most significant impact on the purchase amount?

• Objective: Identify the key features that influence the purchase amount.

1. How do promotional codes and discounts affect purchase amounts, and which types of promotions result in the highest spending  
    • Objective: Analyze the influence of promotional codes, discounts on purchase amounts.

Dataset Link and Information:

<https://www.kaggle.com/datasets/iamsouravbanerjee/customer-shopping-trends-dataset/data>

GitHub Repository:

<https://github.com/GW-datasci/DATS-6103-FA-23-SEC-11-TEAM-1.git>