DA Assignment - 1

Objective:

Students will design an interactive **Dashboard** using the provided dataset. The goal is to analyze key metrics and provide insights into trends, performance and sales.

Dataset: Link

Attribute information

Invoice id: Computer-generated sales slip invoice identification number

Branch: Branch of supercenter (3 branches are available identified by A, B and C).

City: Location of supercenters

Customer type: Type of customers, recorded by Members for customers using member

cards and Normal for those without member cards.

Gender: Gender type of customer

Product line: General item categorization groups - Electronic accessories, Fashion accessories, Food and beverages, Health and beauty, Home and lifestyle, Sports and travel

Unit price: The price of each product in $

Quantity: Number of products purchased by the customer

Tax: 5% tax fee for customers buying

Total: Total price including tax

Date: Date of purchase (Record available from January 2019 to March 2019)

Time: Purchase time (10 am to 9 pm)

Payment: Payment used by the customer for the purchase (3 methods are available – Cash, Credit card and Ewallet)

COGS: Cost of goods sold

Gross margin percentage: Gross margin percentage

Gross income: Gross income

Rating: Customer stratification rating on their experience (scale of 1 to 10)

Task:

Upload the dataset , delete the unnecessary columns if required

Create below Visualization:

● Pie Chart

● Stacked Bar Chart

● Line Chart

● Simple Table Chart

Screenshot of Dashboard

key findings and insights

City-wise Gross Income:

● Naypyitaw leads with the highest gross income (5.3K), followed by Yangon (5.1K) and Mandalay (5.1K).

● The variation in gross income among cities is relatively small.

Product Line Performance:

● "Food and Beverages" contributes the highest total sales (56.1K).

● "Health and Beauty" has the lowest total sales (49.2K).

● Other product lines, such as "Sports and Travel" and "Fashion Accessories," have similar sales figures around 54K.

Branch-wise Performance:

- Branch B (Mandalay) has the highest sales quantity (1,820 units).
- Branch C (Naypyitaw) and Branch A (Yangon) have similar sales figures.
- The total sales across all branches amount to 3,22,966.75.

Average Sales by Product Line:

- The pie chart indicates a nearly balanced contribution across different product categories.
- The highest average sales value is 336.64 (17.35%) for a particular product line.
- Other product lines contribute between 15.73% and 17.12%, suggesting no extreme variation.

User Controls:

- Filters for **Time, Date, and Branch** allow for dynamic data analysis.
- These filters can help in refining the insights based on specific periods or locations.