

## DA Assignment - 2

### 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

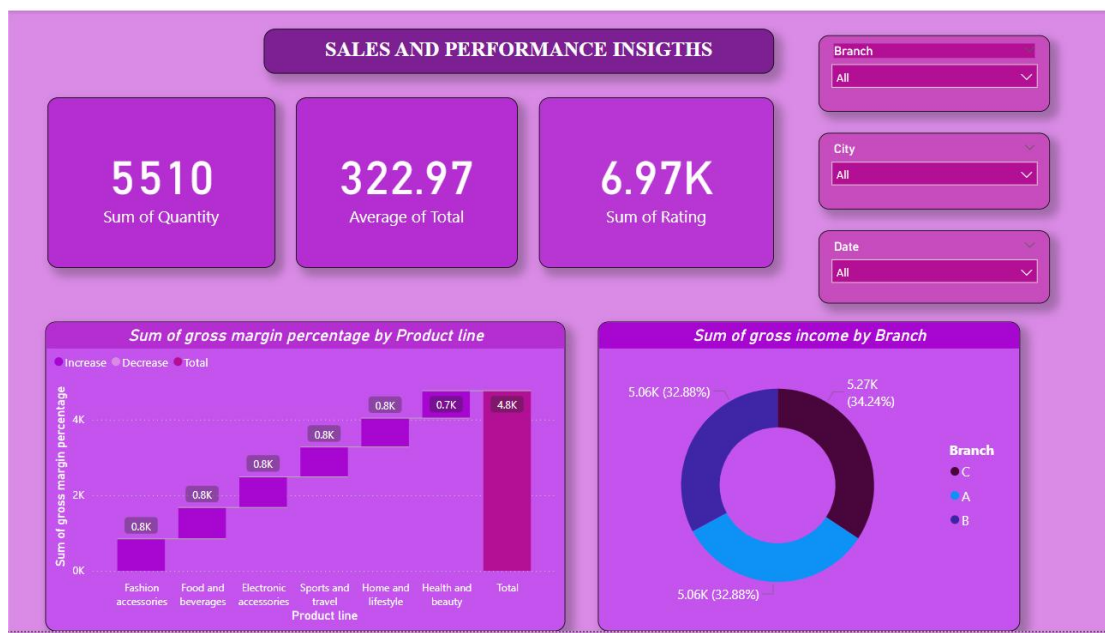
Gross income: Gross income

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

## Task:

1. **Import the Dataset:** Load the provided dataset into **Power BI**.
2. **Data Cleaning:** Ensure data consistency and Create new Columns if required
3. **Dashboard Components** (Must include):
  - **Cards, Slicers, Visualizations**
4. **Interactivity:** Ensure the dashboard is interactive

## Screenshot of Dashboard



## key findings and insights

### Overall Performance Metrics:

- **Sum of Quantity Sold:** 5,510 units.
- **Average Total Sales:** 322.97.
- **Total Rating Score:** 6.97K.

### Branch-wise Gross Income:

- **Branch C** has the highest gross income (5.27K or 34.24% of total).
- **Branches A and B** have equal gross income (5.06K or 32.88% each).
- This suggests a fairly balanced revenue distribution, with **Branch C** slightly outperforming the others.

### **Product Line Gross Margin Percentage:**

- The total gross margin percentage is **4.8K**.
- "Health and Beauty" has the **highest margin percentage** (around 4.8K).
- Other product lines, including **Fashion Accessories, Food and Beverages, Electronic Accessories, and Sports & Travel**, have lower but similar contributions (0.8K each).
- **"Home and Lifestyle" has the lowest margin percentage** (0.7K).

### **User Controls:**

- Filters for **Branch, City, and Date** allow for refined data analysis.
- Users can analyze specific periods or locations to identify trends.