



Data Visualisation with Seaborn Project

Instructions

Background Information

Quick Mart chain of supermarkets was founded three years ago and has done tremendous growth over time. It currently runs three branches.

As a **Data Analyst** working for the supermarket, you need to create an analysis report that helps the management decide on the marketing strategy.

Within the report, they would like you to provide insights on which product categories performed best, which branches had the highest sales and profit, the trends of sales over time for each branch, the average amount spent by customers, and the average rating for each branch. You will then be required to provide recommendations on the best marketing strategy to undertake.

The expected deliverable is a Python notebook that will cover the following:

- Business understanding
- Data exploration
- Data cleaning
- Data analysis and visualization (Using Seaborn for visualization)
- Summary of findings
- Recommendations

You can use the following [guiding notebook](#) to get started.

Dataset

The dataset provided contains sales data for the past three months.

- Dataset Link: <https://bit.ly/SupermarketsDS>

Attribute information

- **Invoice id:** Computer generated sales slip invoice identification number

- **Branch:** Branch of supercenter (3 branches identified by A, B, and C).
- **City:** Location of supercenters
- **Customer type:** Type of customers, recorded by Members for customers using member card and Normal for without member card.
- **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 customer 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 overall shopping experience (On a scale of 1 to 10)

Dataset Source

- <https://www.kaggle.com/agasca/retail-sales>