Project 1: Simplified E-commerce Sales Analysis

Data Curation and Visualization Course

1 Project Objective

Analyze sales patterns and customer behavior from Brazilian e-commerce data using essential datasets.

2 Data Source

- **Repository:** `https://github.com/olist/work-at-olist-data`
- **Datasets:** Download these 3 CSV files:
    1. `olist_orders_dataset.csv` - Core order information
    2. `olist_order_items_dataset.csv` - Product details and prices
    3. `olist_customers_dataset.csv` - Customer information

3 Data Collection

- Download the csv files manually or use "Download raw file" option
- Verify that the datasets contain common keys order_id, product_id

4 Data Storage

Store data in three separate pandas DataFrames and establish relationships.
Create unified analysis DataFrame through merging

5 Data Cleaning & Wrangling

Data Cleaning:

- Handle missing values in all columns
- Handle date-time conversions for order timestamps

Data Wrangling:

- Calculate customer lifetime value (total spent per customer)
- Calculate order totals from individual items
- And any other handling you need for the plots

6 Visualization & Dashboard

Create an interactive dashboard showing creative plots such as but not limited to:

- Average order value analysis

- Time series analysis of sales patterns

- Customer Analytics by geography

- Any other interesting trends you observed