

PROJECT BRIEF

PROJECT OVERVIEW:

This project is focused on performing an in-depth analysis of an e-commerce sales dataset to derive key business insights and recommendations. As a data analyst for an e-commerce startup, you will leverage the data to understand sales trends, identify top-selling products, analyze customer behavior, and explore geographical insights. The results will help the company optimize operations, improve marketing strategies, and enhance overall business performance.

OBJECTIVES

The primary objective of this project is to extract actionable business insights from the e-commerce sales data. These insights will inform key decisions regarding product offerings, customer engagement, and sales strategy. Specifically, the analysis will focus on the following:

- Orders per month: Analyzing monthly sales trends and volume.
- Revenue trends: Identifying fluctuations in revenue, peak periods, and opportunities for growth.
- Top-selling products: Determining the most popular products based on sales volume and revenue.
- High-value customers: Identifying customers with high lifetime value (CLV) for targeted marketing.
- Geographical insights: Analyzing sales by region to identify growth opportunities and regional preferences.

PROJECT SCOPE

This project involves several stages, which will include data import, cleaning, exploratory data analysis (EDA), advanced business insights, and visual reporting. The key tasks within the scope of the project are:

- Data Import: Import raw data from CSV files into a SQL database.
- Data Cleaning: Clean the dataset by removing duplicates, handling missing values, and standardizing data.
- Exploratory Data Analysis (EDA): Analyze the dataset to extract basic business insights like orders per month, revenue trends, and top-selling products.
- Advanced Analysis: Perform more detailed analysis, such as identifying high-value customers and deriving geographical insights.
- Reporting: Generate reports summarizing insights, including a PowerPoint presentation for stakeholders and data visualizations (e.g., graphs, charts).
- Documentation and Deployment: Document the entire process and prepare the project for sharing on GitHub.