**💼 Data Analytics Portfolio Project**

**📌 Project Title**: *UK Online Retail Analysis (Jan–Jul 2010)*  
**🔧 Tools Used**: MySQL · Tableau · Excel   
**📂 Type**: Real-world business simulation

🚀 **Objective**  
Simulated an end-to-end data analyst role by analyzing **15,000 rows of e-commerce sales data** to generate actionable business insights. Focused on replicating how work is done in companies — from stakeholder questions to final dashboard delivery.

📊 **Key Responsibilities & Deliverables**

✅ **Data Cleaning & Preparation (SQL)**

* Removed **4683 rows with missing Customer IDs**, **negative or zero quantities**, and **with zero price**.
* Final dataset contained **10,317 clean records** ready for analysis.

✅ **Exploration and Analysis**

* **Time period analyzed**: January 2010 – July 2010
* **Revenue Generated**: £204,898
* **Orders Placed**: 10,317 invoices
* **Top customer contribution**: £11,430 (≈ 5 % of total revenue)
* **Top product contribution**: £6,724 (≈ 3 % of total revenue)

✅ **Stakeholder Questions Answered**:

1. **Top Customers:**
   * Top 10 customers generated 23 **% of total revenue**, highlighting potential for loyalty programs.
2. **Top Products:**
   * Top 10 products contributed **14 % of total revenue**, ideal for strategic promotion.
3. **Countrywise Performances:** 
   * **UK:** £185,303 (90 % of total revenue)
   * **Netherlands:** £193
   * **Australia:** £358 → Recommended re-evaluation due to poor performance and higher transport costs
4. **Monthly Trends:**
   * **February 2010** had the highest revenue: **£47,198**
   * Revenue trend showed rapid deep from February to March.

✅ **Dashboard Creation (Tableau)**  
Built a clean, interactive dashboard with:

* **KPI Cards**:
  + Total Revenue: £204,898
  + Top Product: Regency Cakestand 3 Tier (Stock Code 22423)
  + Top Customer: Customer ID 15061
* **Visuals**:
  + Monthly Revenue Trend Chart 📈
  + Top 10 Products and Customers (Bar Charts)
  + Country-wise Sales 🌍

🎯 **Strategic Recommendations**

* Reward top customers with **exclusive perks** and gamified loyalty programs to increase retention.
* Promote top products and create **signature offerings** to boost brand identity.
* Exit or restructure in underperforming markets like Australia to reduce overhead.
* Invest more resources in **France and Germany**, which show strong growth potential.
* Launch marketing campaigns.

📈 **Impact**

* Delivered **data-driven insights** that informed strategic decisions on marketing, product promotion, and international expansion.
* Strengthened SQL querying, dashboard storytelling, and stakeholder-focused communication skills.