📖 About This Project

This final-year internship project, **E-commerce Data Analysis Dashboard**, integrates **SQL**, **Python (Jupyter Notebook)**, and **Power BI** to perform end-to-end data analysis on e-commerce sales data. The project includes:

- **Database Development:** Designed an SQL schema, imported multiple datasets, performed complex joins, and created a unified Merged_Data table.
- **Exploratory Data Analysis (EDA):** Cleaned and analyzed the dataset in Jupyter Notebook using Pandas, NumPy, Matplotlib, and Seaborn, discovering key insights such as category imbalance, redundant features, outliers, and seasonal trends.
- **Visualization:** Built interactive dashboards in Power BI for dynamic exploration of KPIs and actionable metrics.
- **Presentation:** Summarized findings and recommendations in a professional PowerPoint presentation, targeting marketing and sales optimization.

🔎 Key Insights:

- Category imbalance affecting model predictions and averages.
- Correlations between features suggesting redundancy.
- Seasonal and cyclical sales patterns critical for forecasting.

✅ Actionable Recommendations:

- Focus on top-performing categories to improve ROI.
- Address underrepresented areas in data collection.
- Set up real-time KPI dashboards for ongoing monitoring.
- Plan for periodic data updates and analysis refresh.

📂 Project Files Included

- 📄 **SQL Scripts:** Database creation, data merging, and analytical queries (SQLProject_final_query.sql).
- 📑 **Jupyter Notebooks:** Detailed analysis notebooks (DATA VISUALISATION FOR ECOMMERCE.ipynb, INTERNSHIP PROJECT 4RTH YEAR.ipynb).
- 📊 **Power BI Dashboards:** Interactive .pbix files (if included).
- 🗃️ **Data Files:** Sample CSV datasets (Details1.csv, Details2.csv, Details_3.csv).
- 🎨 **Presentation:** Final project presentation in PowerPoint (PPT OF 4th Year Presentaion.pptx).

✅ LinkedIn Post Banner Suggestion