■ Finnish Market Monitor – Data Analytics Project

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■ Objective

Develop an automated analytics pipeline combining stock, interest-rate, and macroeconomic data for Finnish markets. Demonstrates expertise in ETL, SQL, visualization, and financial insight generation.

■■ Architecture

APIs → Python ETL → PostgreSQL → Power BI Dashboard

■ Tools & Technologies

Python • PostgreSQL • Power BI • SQLAlchemy • pandas • matplotlib • yfinance

■ Key Deliverables

- PostgreSQL database (`raw` and `model` schemas)
- Automated ETL for Finnish stock data via yfinance
- SQL model `market_overview` – average price, volatility, volume
- Power BI dashboard with KPI cards and trend visuals
- Organized GitHub repository with code and documentation

■ Example Insight

Rising Euribor rates correlate with lower average stock prices — the energy sector shows more resilience compared to industrials.

■ Skills Showcased

- Data Engineering & SQL Modeling
- Python ETL (pandas, SQLAlchemy)
- Power BI Analytics & Storytelling
- Financial Data Interpretation

■ Next Steps

Integrate Bank of Finland interest rates, Statistics Finland macroeconomic data, and automate daily updates. Publish the final Power BI dashboard and portfolio documentation.