Dashboard Sales Analytics

Aplikasi dashboard sales analytics menggunakan Streamlit dengan visualisasi interaktif.

🗁 Struktur Project

```
TugasABD/
├── app.py                # Aplikasi utama (versi sederhana)
├── data/                 # Folder data CSV
│   ├── customers.csv
│   ├── products.csv
│   └── order_details.csv
├── requirements.txt      # Dependencies
└── Jet/                  # Versi aplikasi dengan visualisasi advanced
    ├── app.py
    ├── data/
    └── requirements.txt
```

🚀 Deploy ke Streamlit Cloud

1. Push ke GitHub

```
git add .
git commit -m "Deploy to Streamlit"
git push origin main
```

2. Deploy di Streamlit Cloud

1. Buka share.streamlit.io
2. Sign in dengan GitHub
3. Klik "New app"
4. Pilih:
    - Repository: PutuNgurahSemara/TugasABD
    - Branch: main
    - Main file: app.py atau Jet/app.py
5. Klik "Deploy"!

💻 Run Locally

```
# Install dependencies
pip install -r requirements.txt

# Run aplikasi
```

```
streamlit run app.py

# Atau versi Jet
cd Jet
streamlit run app.py
```

📊 Features

Versi Standard (app.py)

- ☑ Customer management dengan filter usia
- ☑ Product analytics dengan bar chart
- ☑ Order tracking dan trends
- ☑ Export data ke CSV

Versi Jets (Jet/app.py)

- ☑ Interactive Plotly visualizations
- ☑ Advanced analytics dashboard
- ☑ Time series analysis
- ☑ Heatmaps dan scatter plots
- ☑ Customer segmentation
- ☑ Product performance metrics

📦 Data

Data disimpan dalam format CSV di folder data/:

- customers.csv: Data pelanggan (100 records)
- products.csv: Data produk (50 records)
- order_details.csv: Detail transaksi (400+ records)

🔧 Tech Stack

- **Streamlit**: Web framework
- **Pandas**: Data manipulation
- **Plotly**: Interactive visualizations (Jet version)
- **Matplotlib**: Static charts (Standard version)