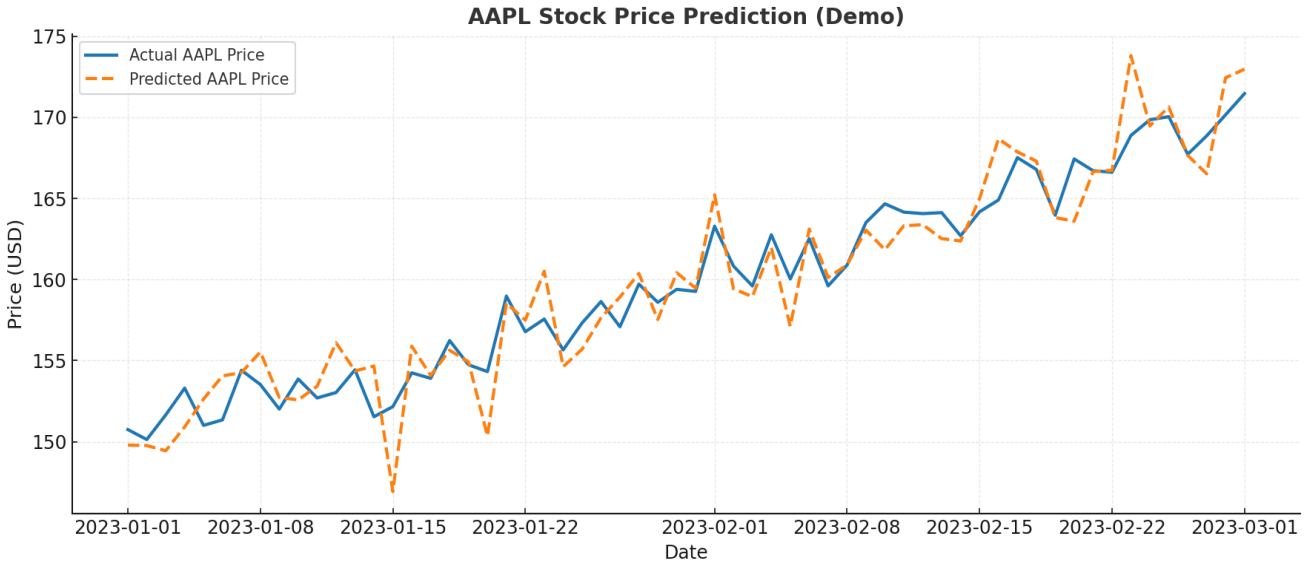
Stock Prediction Project Overview

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Project Root
├── .env                # Store secrets (API keys, stock name, DB credentials)
├── .gitignore          # Ignore virtual envs, data, secrets
├── notebooks/          # Jupyter notebooks for exploration
│   └── stock_prediction.ipynb
├── src/                # Source code (reusable modules)
│   ├── config.py       # Parameters (STOCK = "AAPL")
│   ├── data_acquisition.py
│   ├── preprocessing.py
│   └── modeling.py
├── data/               # Raw and processed datasets
├── results/            # Saved models, plots, reports
```

 Workflow Stages
1. Problem Framing & Scoping
2. Data Acquisition (APIs)
3. Data Preprocessing & Cleaning
4. Exploratory Data Analysis
5. Feature Engineering
6. Modeling & Evaluation
7. Results Reporting (Stakeholder Memo)
8. Deployment (Optional)

This project demonstrates a full lifecycle financial data pipeline for predicting stock prices. It includes data acquisition from APIs, preprocessing, EDA, feature engineering, modeling, and reporting. The structure is modular (src/, notebooks/, data/, results/) with configuration handled via config.py or .env files.