**README for My Django Application**

**Overview**

Welcome to my Django application designed to provide interactive data visualization features using financial data obtained from Yahoo Finance API. This application allows users to analyze stock price trends for different companies over specific time periods.

**Project Structure**

* **manage.py**: Django management script for running administrative tasks.
* **Mywebpage/**: Main Django application directory.
  + **settings.py**: Configuration settings for the Django project.
  + **urls.py**: URL routing configuration.
  + **views.py**: Contains view functions to handle HTTP requests.
  + **models.py**: Defines data models for the application.
  + **templates/singlepage/**: Directory to store HTML templates.
  + **static/**: Directory to store static files such as CSS, JavaScript, and images.
* **env/**: Virtual environment folder.
* **README.md**: This README file.

**Installation**

To run the application locally, follow these steps:

1. Clone the repository to your local machine:

*git clone <repository-url>*

1. Navigate to the project directory:

*cd relative\_path/Mywebpage*

1. Create and activate a virtual environment:

*python3 -m venv env*

*source env/bin/activate*

1. Install the required dependencies:
2. Run the Django development server:

*python manage.py runserver*

1. Access the application in your web browser at [http://localhost:8000](http://localhost:8000/).

**Dependencies**

The project uses the following key dependencies:

* Django: Web framework for building the application.
* Matplotlib: Library for creating static, animated, and interactive visualizations in Python.
* Pandas: Data manipulation and analysis library.
* NumPy: Library for numerical computing in Python.
* yfinance: Python library to fetch historical market data from Yahoo Finance.

**Usage**

Upon accessing the application, users can navigate to different pages to view stock price trends for various companies. They can select the time period and company ticker symbol to visualize the data.

**Feedback and Contributions**

Feedback, bug reports, and contributions are welcome!

This README provides an overview of the project structure, installation instructions, dependencies, usage guidelines, and information about authentication and contributions. Feel free to expand or customize it as needed for your specific project requirements.  
  
The following diagrams are being generated (from google colab):  
  


