

Kontiki - Market Prices Mini-Project

Aim:

Create a small Django app that saves market prices, provides a basic visualisation, and shows the largest share price increase over the past 5 working days.

The mini-project's purpose is to show us what you can achieve when working in a production environment. Consequently, please use any resources and tools that you would use in production. This includes any useful third party libraries.

We hope that you find the mini-project fun to write!

Elements:

1. Write a script to save 6 companies' closing share prices on a daily basis. When run, this script should: a) fetch your chosen companies' closing prices from an online source¹; and b) save the companies' closing prices to your app's database².
2. Display a line graph of the saved share prices for your chosen companies over the past 5 working days on an html page. Use your Django app's local server to show this page.
3. Write a short manager method³ to find the company of your saved companies that has the closing share price that has increased the most over the past 5 working days.⁴ Ensure that this method is unit tested.

Send it to us:

Finish by uploading your finished code to an online repo (e.g., Github or Bitbucket), and sharing the code with us. We will clone your repo and check out your code locally!

¹ Use any online source provided that we will also be able to access it. Some free options are: <https://www.alphavantage.co/>; <https://eodhistoricaldata.com/financial-apis/live-realtime-stocks-api/>; <https://marketstack.com/>; <https://finnhub.io/>;

² Use any database that you would like. SQL Lite is sufficient.

³ <https://docs.djangoproject.com/en/3.1/topics/db/managers/>;

⁴ We are looking for the simple difference. To get this, simply subtract the close price on the first day from the close price on the last day. You might want to check out: <https://docs.djangoproject.com/en/3.1/topics/db/aggregation/>