Option Finder Report

Main Purpose

Main purpose of this report is to replicate the option finder on the "Option Profit Calculator" website (https://www.optionsprofitcalculator.com/option-finder.html) in python code.

Inputs and outputs

Inputs:

- the ticker of the underlying asset
- target future price in USD
- expected date
- maximum risk in USD

Outputs:

- contract type (call/put)
- strike price
- expiration date
- No. of contracts
- entry cost
- estimated return at target price

Note: The inputs and outputs above are for one single plan. In practice, the final python code can take a list of sets of inputs and return a list of possible options for each set of inputs.

Steps

Step1

There is a python API for Yahoo Finance from which we can retrieve the most recent stock price of a stock.

Step2

Comparing the target price and current stock price we can decide if we need a call or put option.

Step3

Information about the available options with different strike price and expiration date can be scraped from Yahoo Finance (I am very confident about it). Example link: https://finance.yahoo.com/quote/WKHS/options?p=WKHS&date=1597363200

Step4

Proper options will be chosen according to the target price and expected date.

Step5

No. of contracts will be calculated based on the maximum risk amount and price of the option. Estimated return will be also calculated.

Step6

The result will be returned in ANY desired format (to be discussed).

Estimation

The whole coding process might take around 2-3 days.

Note

Given the flexibility of the programming, ANY feasible features can be added to the project.