Homework 6: Server-side Scripting using Python Flask, JSON and Stocks API

Grading Guidelines

Graders will test your homework on Firefox and Chrome.

Total Points: 10

Grading Guidelines:

Search Form (2 points in total)

- The initial web page with proper fields in the search form, along with "Stock Search" header and mandatory fields validation for the search input (0.5 points)
- "Clear" button clears the input textbox and all the search results. (0.5 point)
 - o If your page fails to clear the search form or the previous results, 0.5 points will be deduced.
- The "Search" button, the page maintains the previous input values (1 point)
 - o If your page fails to maintain the original input value, 0.5 points will be deducted
 - Failure to handle the case when the Tiingo API returns no matching result, 0.5 points will be deducted.

Search Results (9 points in total)

- Display company outlook information tab: (1 point)
 - Showing the company outlook information retrieved and calculated from Web
 Service in tabular format as described in the homework description (1 point)
 - 1 point will be deduced for every field displaying incorrect value or format.
- Display stock information tab: (1 point)
 - Showing the stock information retrieved and calculated from Web Service in tabular format as described in the homework description (1 point)
 - 0.5 points will be deduced for every field displaying incorrect value or format along with the change symbols.
 - If the change and change percent values are not rounded to two after the decimal point, 0.5 points will be deducted.
- Display the stock quote/volume charts tab: (4 points)
 - Display chart title with correct name and date in correct format (1 point)
 - o If the title text is not correct, **0.5** points will be deduced
 - If the title date for stock quote is not correct or not in correct format, 0.5
 point will be deduced
 - Display stock price and volume in correct value and format (1 point)
 - o If the stock price doesn't show the correct value, **0.5** points will be deduced.
 - o If the stock price interval is not by day, **0.5** points will be deduced.
 - If the area below the stock price series line is not filled with blue gradient color, 0.5 points will be deduced.

- o If the volume doesn't show the correct value, **0.5 points** will be deduced.
- If the volume is not shown as the grey column bar, 0.5 points will be deduced
- o If the volume interval is not by day, **0.5** point will be deduced.
- Display zoom level in correct value and format (2 points)
 - If the zoom level doesn't show the correct value or misses any value, 0.25
 points will be deduced for each value.
 - If the chart display doesn't change on change of any of the zoom levels, 2
 points will be deducted.

• Display the stock news tab: (2 points)

- Display stock news cards (2 points)
 - For each missing data in the card, 0.25 points will be deducted with a maximum of 0.5 points.
 - The styling and structure of the card should be similar to the reference video; **0.5 points** will be deducted otherwise.
 - Displaying an incorrect number of articles will result in a 0.5 points deduction.
 - If the "See Original Post" doesn't hyperlink to the correct news, 0.5 points will be deduced.

IMPORTANT

- You should not call any APIs directly from JavaScript. Doing this will result in a 4-point penalty.
- If jQuery is used, **4 points** will be deducted.
- You should implement HW 6 using Python.
- You should implement HW 6 using AWS/GCP/Azure cloud server as described in HW 5.
 Otherwise, 3 points will be deducted. This will be verified with an additional link in the Table of exercises, showing a sample API call to your "cloud" service and verifying the corresponding JSON result.

Source code submission:

On your course homework page, you **must** update the HW6 link to refer to your new HW 6 home page. Also provide an additional link to one of your cloud query entry points, below the homepage link.