

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)
 - If your page fails to clear the search form or the previous results, 0.5 points will be deducted.
- The “Search” button, the page maintains the previous input values (**1** point)
 - 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 deducted 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 deducted 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)
 - If the title text is not correct, **0.5** points will be deducted
 - If the title date for stock quote is not correct or not in correct format, **0.5** point will be deducted
 - Display stock price and volume in correct value and format (**1** point)
 - If the stock price doesn't show the correct value, **0.5** points will be deducted.
 - If the stock price interval is not by day, **0.5** points will be deducted.
 - If the area below the stock price series line is not filled with blue gradient color, 0.5 points will be deducted.

- If the volume doesn't show the correct value, **0.5 points** will be deducted.
- If the volume is not shown as the grey column bar, **0.5 points** will be deducted.
- If the volume interval is not by day, **0.5 point** will be deducted.
- 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 deducted 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 deducted.

****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.