

**Introduction**

**Experience Technology at JP Morgan Chase**

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**Module 3 Task Overview**

Display data visually for traders. Use Perspective to create the chart for the trader’s dashboard.

**Aim:** Use Perspective to generate a chart that displays the data feed in a clear and visually appealing manner for traders to monitor this trading strategy. Basically, you have to modify the existing live chart to be able to (1) track and display the ratio between the two stock prices (2) show the historical upper and lower bounds of the stocks' ratio (3) and finally, show 'alerts' whenever these bounds are crossed by the ratio.

1. Please clone this repository to start the task
2. From the existing live graph, update it to track the ratio between two stocks over time and NOT the two stocks’ top\_ask\_price over time.
3. Update the graph to also track the historical upper and lower bounds of the stocks' ratio
4. Trigger 'alerts' (i.e. draw red lines) on the graph whenever the bounds are crossed by the calculated ratio in a specific time period
5. Upload a git patch file as the submission to this task
6. Upload a video detailing your process and work

**Setup / Installation**

In order to get the server and client application code working on your machine, [follow the setup here](https://insidesherpa.s3.amazonaws.com/vinternships/companyassets/Sj7temL583QAYpHXD/setup_devenv_m3_v3.pdf)

**Note**:This is the version of the JPM 3 exercise that uses Python 3. The Python 2.7 version is in [this other repo](https://github.com/insidesherpa/JPMC-tech-task-3)

**How to Run**

Similar to Task 2, start the data feed server by running the python server

Make sure your terminal / command line is in the repository first before doing any of this.

If you are using Windows, make sure to run your terminal/command prompt as administrator.

python datafeed/server3.py

If you encounter an issue with datautil.parser, run this command:

pip install python-dateutil

If you don't have pip, you can install it from: <https://pip.pypa.io/en/stable/installing/>

Run npm install && npm start to start the React application.

It's okay to have audit warnings when installing/running the app.

If you don't have npm (although you should if you followed the set up / installation part), you can install the recommended version alongside NodeJS from: <https://nodejs.org/en/>

The recommended version are node v11.0.0 and npm v6.4.1

Open [http://localhost:3000](http://localhost:3000/) to view the app in the browser. The page will reload if you make edits.

**How to fix the code to meet the objectives**

To make the changes necessary to complete the objectives of this task, [follow this guide](https://insidesherpa.s3.amazonaws.com/vinternships/companyassets/Sj7temL583QAYpHXD/making_changes_m3_v2.pdf).

**How to submit your work**

A patch file is what is required from you to submit. To create a patch file, [follow this guide](https://insidesherpa.s3.amazonaws.com/vinternships/companyassets/Sj7temL583QAYpHXD/create_patch_file_v3a.pdf). Then submit the patch file in the [JPM Module 3 Page](https://www.insidesherpa.com/modules/R5iK7HMxJGBgaSbvk/EbtbrgmwKbgqcXyGt).