



**Automated System for Customized Risk Analysis Using Data
from the FFIEC 102 Reports**

User Guidance

Responsible for:
The University of Chicago 2021 Project Lab Team

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START THE PROGRAM

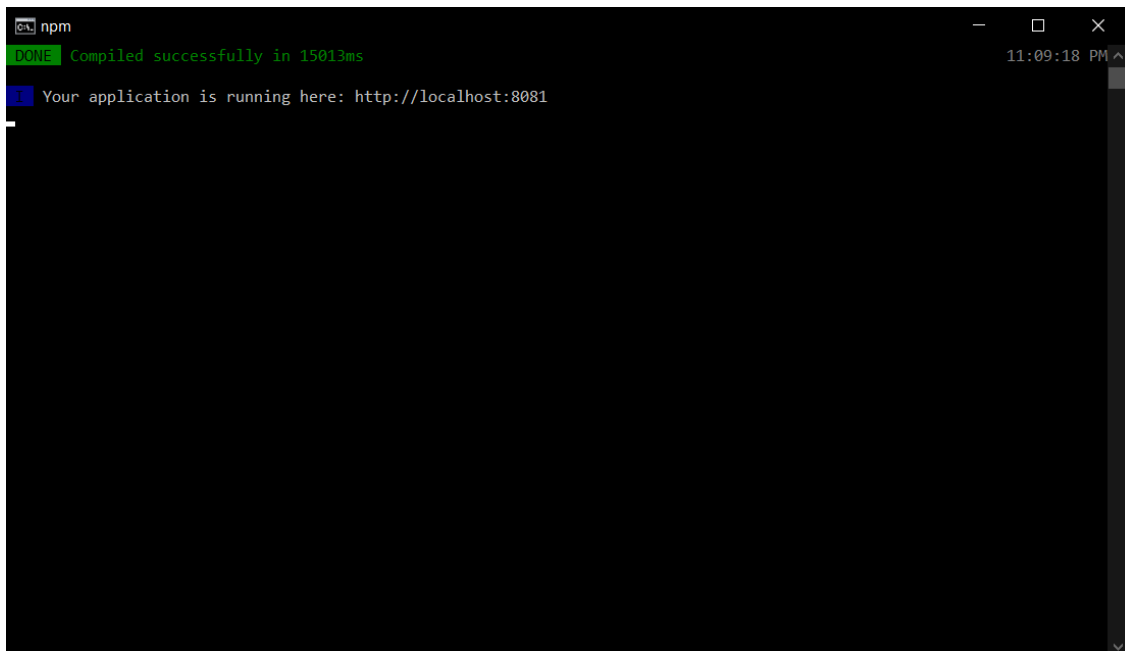
1. Click dashboardRun

__pycache__	4/6/2021 11:08 PM	File folder	
backend	4/6/2021 11:08 PM	File folder	
env	4/6/2021 10:57 PM	File folder	
frontend	4/5/2021 6:49 PM	File folder	
config	4/5/2021 6:49 PM	Python File	1 KB
dashboardRun	4/5/2021 6:49 PM	Windows Batch File	1 KB
dashboardRun	4/5/2021 6:49 PM	Shell Script	1 KB
README.md	4/5/2021 6:49 PM	MD File	3 KB
setup	4/5/2021 6:49 PM	Python File	1 KB

If you are a Windows User, you can use the Windows Batch File to start the program.

If you are a Mac User, you can use the Shell Script to start the program.

2. When you see the terminal screen shows “Compiled successfully”, you are ready to launch the program.



```
npm
DONE Compiled successfully in 15013ms
Your application is running here: http://localhost:8081
```

FIRST TIME USAGE

1. Data File

If it is your first time to launch the program, you should go to: <http://localhost:8080/#/home>. The system will start to download the default six companies into your system. These raw data will be stored in the directory “...\demo\backend\data” after having been downloaded. The data directory contains files shown below:

Name	Date modified	Type	Size
raw_data	4/6/2021 11:10 PM	File folder	
FFIEC102	4/6/2021 11:11 PM	Microsoft Excel Co...	301 KB
FRY9C	4/6/2021 11:11 PM	Microsoft Excel Co...	6,803 KB

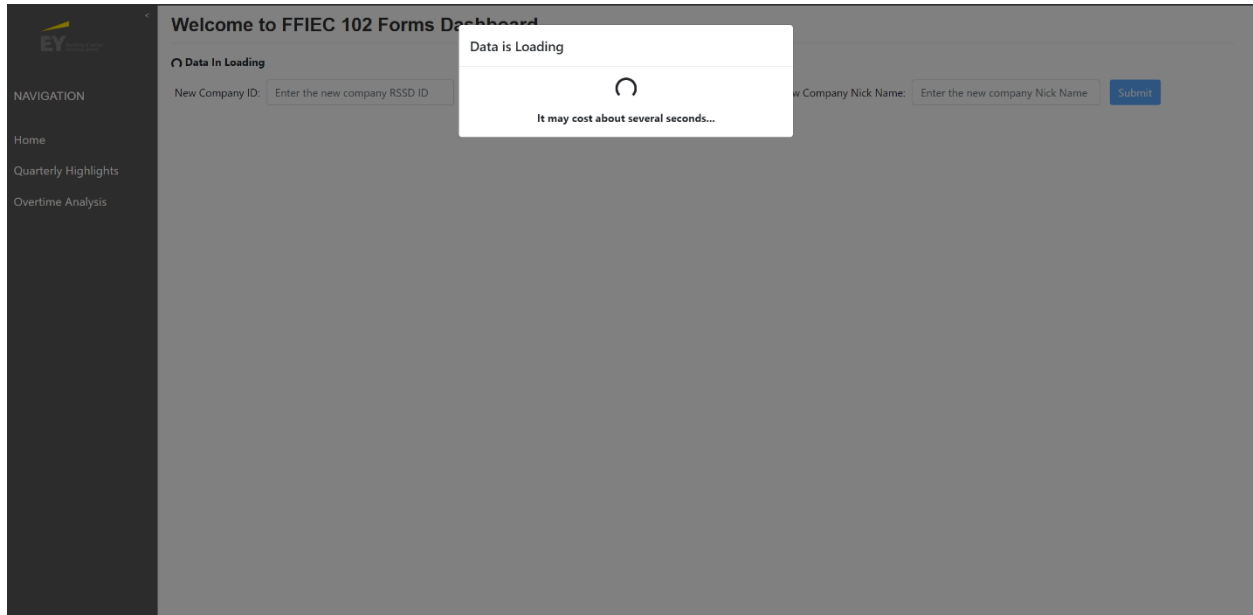
2. data_setting.json

One thing you may notice is that the data_setting.json file in the directory “...\demo\backend” has been updated with current information. You can see in the “reports” section, we specified two forms. If you want to add more forms when analyzing, you may do so by adding the form name after the first two forms.

```
{
  "reports": [
    "FFIEC102",
    "FRY9C"
  ],
  "institutions": {
    "1073757": {
      "Name": "Bank of America",
      "Nick": "BAC",
      "data_status": {
        "FFIEC102": {
          "start_quarter": "2015Q3",
          "end_quarter": "2020Q4"
        },
        "FRY9C": {
          "start_quarter": "2015Q3",
          "end_quarter": "2020Q4"
        }
      }
    },
    "1951350": {
      "Name": "Citigroup",
      "Nick": "CITI",
      "data_status": {
        "FFIEC102": {
          "start_quarter": "2015Q3",
          "end_quarter": "2020Q4"
        },
        "FRY9C": {
          "start_quarter": "2015Q3",
          "end_quarter": "2020Q4"
        }
      }
    },
    "2388441": {
      "Name": "Goldman Sachs",
      "Nick": "GS",
      "data_status": {
        "FFIEC102": {
          "start_quarter": "2015Q3",
          "end_quarter": "2020Q4"
        },
        "FRY9C": {
          "start_quarter": "2015Q3",
          "end_quarter": "2020Q4"
        }
      }
    }
  }
}
```

3. Data Loading

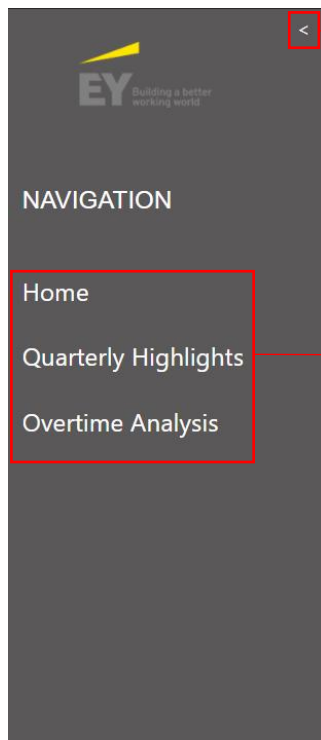
While the data is downloading, you will see the following Data Loading icon appear in front of your screen. The downloading procedure will take approximately 30 seconds to 1 minute.



You can also see in the Terminal the download progress.

```
npm
210331' generated an exception: invalid csv url
2021-04-06 23:11:01,892 - F:\UChicago\PJLAB2\9.3\demo\backend\data\raw_data\2380443\FRY9C_2380443_20170630.csv is downlo
aded
2021-04-06 23:11:01,910 - F:\UChicago\PJLAB2\9.3\demo\backend\data\raw_data\2380443\FRY9C_2380443_20160331.csv is downlo
aded
2021-04-06 23:11:02,446 - F:\UChicago\PJLAB2\9.3\demo\backend\data\raw_data\2380443\FRY9C_2380443_20151231.csv is downlo
aded
2021-04-06 23:11:02,565 - F:\UChicago\PJLAB2\9.3\demo\backend\data\raw_data\2380443\FRY9C_2380443_20161231.csv is downlo
aded
2021-04-06 23:11:02,577 - F:\UChicago\PJLAB2\9.3\demo\backend\data\raw_data\2380443\FRY9C_2380443_20170331.csv is downlo
aded
2021-04-06 23:11:02,590 - F:\UChicago\PJLAB2\9.3\demo\backend\data\raw_data\2380443\FRY9C_2380443_20160630.csv is downlo
aded
2021-04-06 23:11:02,693 - F:\UChicago\PJLAB2\9.3\demo\backend\data\raw_data\2380443\FRY9C_2380443_20160930.csv is downlo
aded
2021-04-06 23:11:06,948 - F:\UChicago\PJLAB2\9.3\demo\backend\data\raw_data\2380443\FRY9C_2380443_20170930.csv is downlo
aded
2021-04-06 23:11:07,371 - F:\UChicago\PJLAB2\9.3\demo\backend\data\raw_data\2380443\FRY9C_2380443_20180930.csv is downlo
aded
2021-04-06 23:11:07,388 - F:\UChicago\PJLAB2\9.3\demo\backend\data\raw_data\2380443\FRY9C_2380443_20190331.csv is downlo
aded
2021-04-06 23:11:07,496 - F:\UChicago\PJLAB2\9.3\demo\backend\data\raw_data\2380443\FRY9C_2380443_20181231.csv is downlo
aded
2021-04-06 23:11:07,500 - F:\UChicago\PJLAB2\9.3\demo\backend\data\raw_data\2380443\FRY9C_2380443_20171231.csv is downlo
aded
2021-04-06 23:11:07,740 - F:\UChicago\PJLAB2\9.3\demo\backend\data\raw_data\2380443\FRY9C_2380443_20180630.csv is downlo
aded
2021-04-06 23:11:08,155 - F:\UChicago\PJLAB2\9.3\demo\backend\data\raw_data\2380443\FRY9C_2380443_20180331.csv is downlo
aded
```

NAVIGATION BAR



The arrow here will serve as open and close the Navigation Bar.

You can select the page you want to go to.

HOME PAGE

After data is successfully downloaded, your homepage will show the default six companies in the chart. You will be able to add new company by specifying: 1. Company ID, 2. Company Name, 3. Company Nick Name.

① Company ID ② Company Name ③ Company Nick Name


A screenshot of the 'Welcome to FFIEC 102 Forms Dashboard'. On the left is a dark grey navigation bar with the EY logo and the word 'NAVIGATION'. Below it are three menu items: 'Home', 'Quarterly Highlights', and 'Overtime Analysis'. The main content area has a title 'Welcome to FFIEC 102 Forms Dashboard'. Below the title are three input fields: 'New Company ID: Enter the new company RSSD ID', 'New Company Name: Enter the new company Name', and 'New Company Nick Name: Enter the new company Nick Name'. Each input field is highlighted with a red box and has a red arrow pointing to it from a label above. To the right of these fields is a blue 'Submit' button. Below the input fields is a table with three columns: 'ID', 'Name', and 'Nickname'. The table contains six rows of data for different companies. At the bottom left of the table is a blue 'Update data' button, highlighted with a red box and a red arrow pointing to it from the text 'Update Data:'.

ID	Name	Nickname
1039502	JP Morgan	JPM
1073757	Bank of America	BAC
1120754	Wells Fargo	WF
1951350	Citigroup	CITI
2162966	Morgan Stanley	MS
2380443	Goldman Sachs	GS

Update Data:

If you perceive there are FFIEC forms have been released, you may click the update data button to update the entire data file.

Please note that you need to enter valid company ID. If there is any invalid input or you input an existing company ID, the system will return error message as shown below.


NAVIGATION
[Home](#)
[Quarterly Highlights](#)
[Overtime Analysis](#)

Welcome to FFIEC 102 Forms Dashboard


Institution not found

New Company ID:

New Company Name:

New Company Nick Name:

ID	Name	Nickname
1039502	JP Morgan	JPM
1073757	Bank of America	BAC
1120754	Wells Fargo	WF
1951350	Citigroup	CITI
2162966	Morgan Stanley	MS
2380443	Goldman Sachs	GS


NAVIGATION
[Home](#)
[Quarterly Highlights](#)
[Overtime Analysis](#)

Welcome to FFIEC 102 Forms Dashboard

The institution 1039502 already exists

New Company ID:

New Company Name:

New Company Nick Name:

ID	Name	Nickname
1039502	JP Morgan	JPM
1073757	Bank of America	BAC
1120754	Wells Fargo	WF
1951350	Citigroup	CITI
2162966	Morgan Stanley	MS
2380443	Goldman Sachs	GS

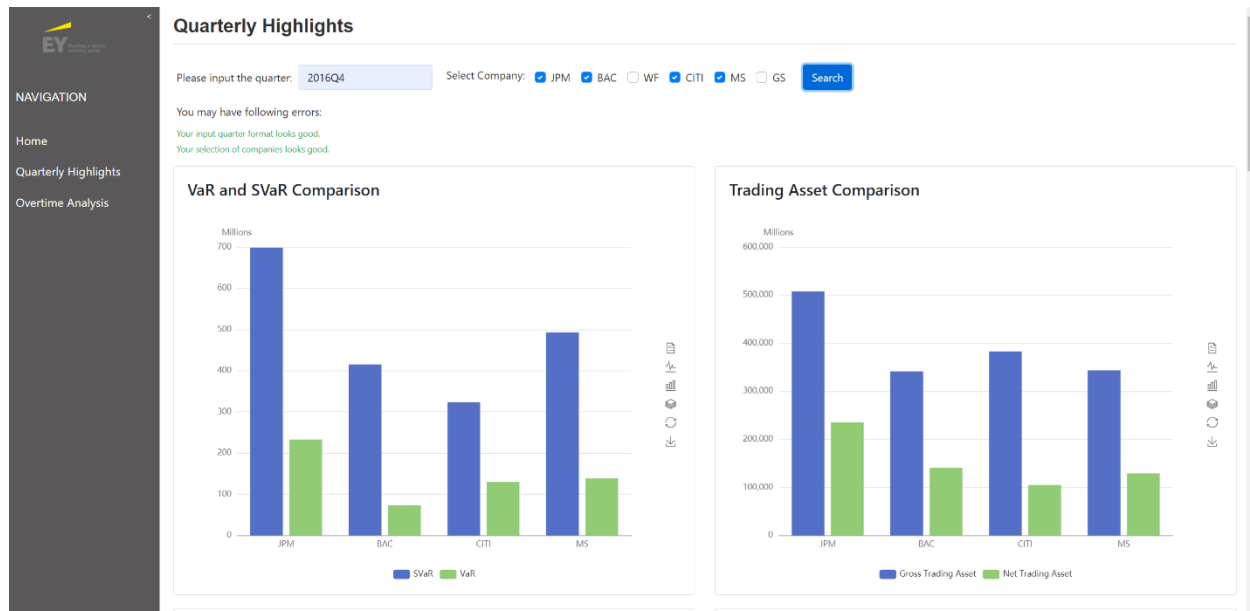
QUARTER HIGHLIGHTS

1. The following is the default page of Quarterly Highlights section. You may notice that in default, we have selected all the six companies and have specified one quarter.

The screenshot shows the 'Quarterly Highlights' page. On the left is a dark sidebar with the EY logo and a 'NAVIGATION' menu containing 'Home', 'Quarterly Highlights', and 'Overtime Analysis'. The main content area has a title 'Quarterly Highlights'. Below the title, there is a form with two sections: 'Please input the quarter:' with a text box containing '2020Q4', and 'Select Company:' with six radio buttons, all of which are checked (JPM, BAC, WF, CITI, MS, GS). A blue 'Search' button is to the right of the company selection. Below the form, there are two large empty boxes labeled 'VaR and SVaR Comparison' and 'Trading Asset Comparison'. A small error message is visible: 'You may have following errors: Your input quarter format looks good. Your selection of companies looks good.'

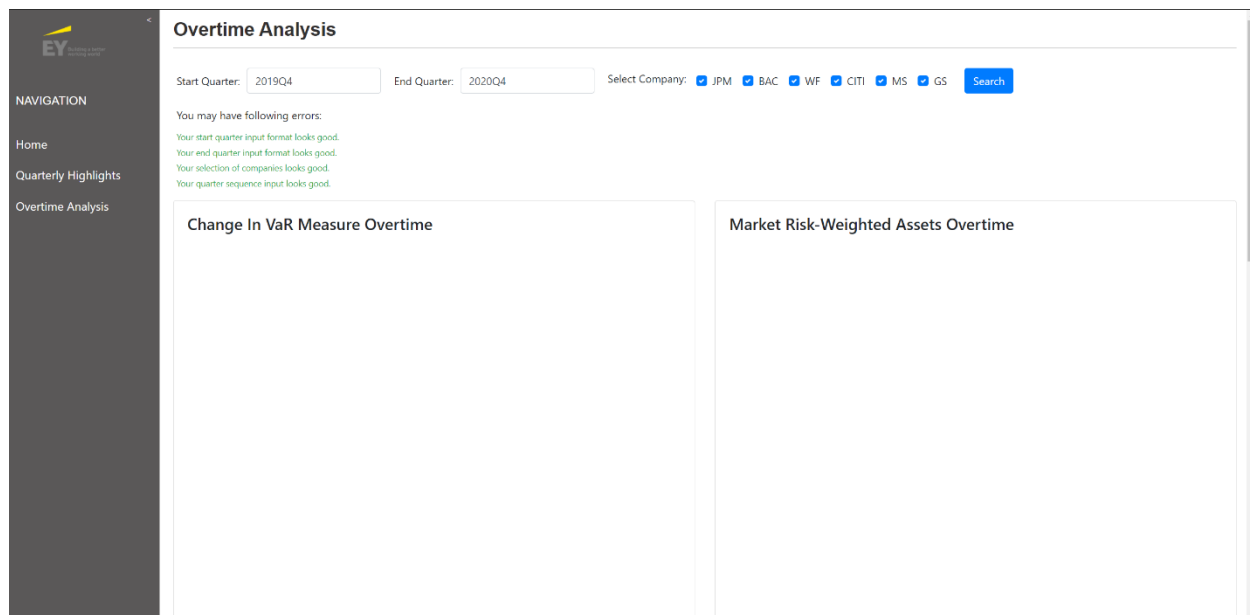
This screenshot is identical to the one above but includes three numbered annotations with red arrows pointing to specific elements:
① Input **Quarter** here
Format: **Year + Quarter**
Example: 2016Q3
The arrow points to the 'Please input the quarter:' text box, which now contains 'example: 2020Q3'.
② You can check as many companies as you want.
The arrow points to the company selection radio buttons.
③ Click here to see the diagrams.
The arrow points to the blue 'Search' button.
Below the form, the same two large empty boxes labeled 'VaR and SVaR Comparison' and 'Trading Asset Comparison' are visible. The error message now reads: 'You may have following errors: Your input should be at the form format like 2020Q4. You need to select at least one company.'

2. After clicking “Search”, you will see these Quarterly Highlights diagrams.



OVERTIME ANALYSIS

1. The following is the default page of Overtime Analysis section. You may notice that in default, we have selected all the six companies and have specified both start and end quarter.



① Input **Start Quarter** here ② Input **End Quarter** here ③ You can check as many companies as you want.

Format: **Year + Quarter**
Example: 2016Q3

Format: **Year + Quarter**
Example: 2020Q4

④ Click here to see the diagrams.

⑤ If you do not meet the input requirements, there will be some **error warnings**.

2. After clicking “Search”, you will see these Overtime Analysis diagrams. Here is an example:

