

Forex Calendar Scraper User Guide

Objective

This document specifies how to use the calendar scraper to download historical data from <https://www.forexfactory.com/calendar.php>, a website publishing economic events that can be used to anticipate market volatility. Also, a couple of illustrative examples (with screenshots attached) are included in the document.

Python package

The program is written in Python 3. Five python packages are used in the program, which are 1) BeautifulSoup, 2) argparse, 3) requests, 4) pandas, and 5) lxml. Please ensure that these packages are installed, so that the program can be successfully executed.

Argument

forexfactory.py is a command line program. Some arguments should be provided in the command line to get data. Some arguments are mandatory inputs, while one option is optional. It takes around 1 minute to generate output file containing 1-month events.

Mandatory

--datefrom: This argument allows user to choose a date from of when to start downloading data. The date should be entered with format YYYYMMDD. For example, --datefrom 20180710 will download data from 10th July, 2018.

--outfile: This argument allows the user to enter the file name and choose the file type of the output file. If the user wants to create an excel file, the filename entered should be followed by .xlsx. For example, --outfile filename.xlsx will create an excel file named 'filename'. On the other hand, If the user wants to create an csv file, the filename entered should be followed by .csv. For example, --outfile filename.csv will create an csv file named 'filename'. The output file will be generated at the folder where the program is located at.

Optional

--dateto: This argument allows user to choose a date to of when to end downloading data. The date should be entered with format YYYYMMDD. For example, --dateto 20180710 will download data up to 10th July, 2018. If the user does not enter any input, the program by default will download data until the date the program is executed

Illustrative examples

- 1) **Standard usage:** enter start date and output file name, example command line looks this:
`python3 forexfactory.py --datefrom 20180613 --outfile standard.xlsx`, this will generate an excel file named 'standard' that contains events from 13th June, 2018 to the date when the program is executed (14th July, 2018, in this example).

Use terminal to execute the program

```
ForexFactory — -bash — 80x24
Last login: Sat Jul 14 16:16:22 on ttys000
[James-3:~ ya25854$ cd Desktop/ForexFactory/
[James-3:ForexFactory ya25854$ python3 forexfactory.py --datefrom 20180613 --outfile standard.xlsx
James-3:ForexFactory ya25854$
```

Excel file generated at the folder where the program is located



Format of the excel file

	A	B	C	D	E	F	G	H
1	Date	Time	Currency	Impact	Event	Actual	Forecast	Previous
2	Jun 13, 2018	3:15am	CHF	medium	PPI m/m	0.2%	0.3%	0.4%
3	Jun 13, 2018	4:30am	GBP	high	CPI y/y	2.4%	2.4%	2.4%
4	Jun 13, 2018	4:30am	GBP	medium	PPI Input m/m	2.8%	1.7%	0.6%
5	Jun 13, 2018	4:30am	GBP	low	Core CPI y/y	2.1%	2.1%	2.1%
6	Jun 13, 2018	4:30am	GBP	low	HPI y/y	3.9%	4.4%	4.2%
7	Jun 13, 2018	4:30am	GBP	low	PPI Output m/m	0.4%	0.3%	0.4%
8	Jun 13, 2018	4:30am	GBP	low	RPI y/y	3.3%	3.4%	3.4%
9	Jun 13, 2018	5:00am	EUR	low	Employment Change q/q	0.4%	0.3%	0.3%
10	Jun 13, 2018	5:00am	EUR	low	Industrial Production m/m	-0.9%	-0.6%	0.6%
11	Jun 13, 2018	5:38am	EUR	low	German 10-y Bond Auction	0.481.1		0.6212.8
12	Jun 13, 2018	8:30am	USD	high	PPI m/m	0.5%	0.3%	0.1%
13	Jun 13, 2018	8:30am	USD	medium	Core PPI m/m	0.3%	0.2%	0.2%
14	Jun 13, 2018	10:30am	USD	high	Crude Oil Inventories	-4.1M	-1.4M	2.1M
15	Jun 13, 2018	2:00pm	USD	high	FOMC Economic Projections			
16	Jun 13, 2018	2:00pm	USD	high	FOMC Statement			

17	Jun 13, 2018	2:00pm	USD	high	Federal Funds Rate	<2.00%	<2.00%	<1.75%
18	Jun 13, 2018	2:30pm	USD	high	FOMC Press Conference			
19	Jun 13, 2018	7:01pm	GBP	low	RICS House Price Balance	-3%	-5%	-7%
20	Jun 13, 2018	9:00pm	AUD	low	MI Inflation Expectations	4.2%		3.7%
21	Jun 13, 2018	9:30pm	AUD	high	Employment Change	12.0K	18.8K	18.3K
22	Jun 13, 2018	9:30pm	AUD	high	Unemployment Rate	5.4%	5.5%	5.6%
23	Jun 13, 2018	10:00pm	CNY	medium	Fixed Asset Investment ytd/y	6.1%	7.0%	7.0%
24	Jun 13, 2018	10:00pm	CNY	medium	Industrial Production y/y	6.8%	6.9%	7.0%
25	Jun 13, 2018	10:00pm	CNY	low	Retail Sales y/y	8.5%	9.6%	9.4%
26	Jun 13, 2018	10:00pm	CNY	low	Unemployment Rate	4.8%		4.9%
27	Jun 13, 2018	10:06pm	CNY	low	Foreign Direct Investment ytd/y	1.3%		0.1%
28	Jun 14, 2018	12:30am	JPY	low	Revised Industrial Production m/m	0.5%	0.3%	0.3%
29	Jun 14, 2018	1:30am	EUR	low	German Final CPI m/m	0.5%	0.5%	0.5%
30	Jun 14, 2018	2:45am	EUR	low	French Final CPI m/m	0.4%	0.4%	0.4%
31	Jun 14, 2018	4:30am	GBP	high	Retail Sales m/m	1.3%	0.5%	1.8%
32	Jun 14, 2018	7:45am	EUR	high	Main Refinancing Rate	0.00%	0.00%	0.00%
33	Jun 14, 2018	8:30am	CAD	medium	NHPI m/m	0.0%	0.2%	0.0%
34	Jun 14, 2018	8:30am	EUR	high	ECB Press Conference			
35	Jun 14, 2018	8:30am	USD	high	Core Retail Sales m/m	0.9%	0.5%	0.4%

2) **Complete usage:** enter start date, end date, and output file name, example command line looks this: `python3 forexfactory.py --datefrom 20180430 --dateto 20180502 --outfile complete.csv`, this will generate an csv file named 'complete' that contains events from 30th April, 2018 to 2nd May, 2018.

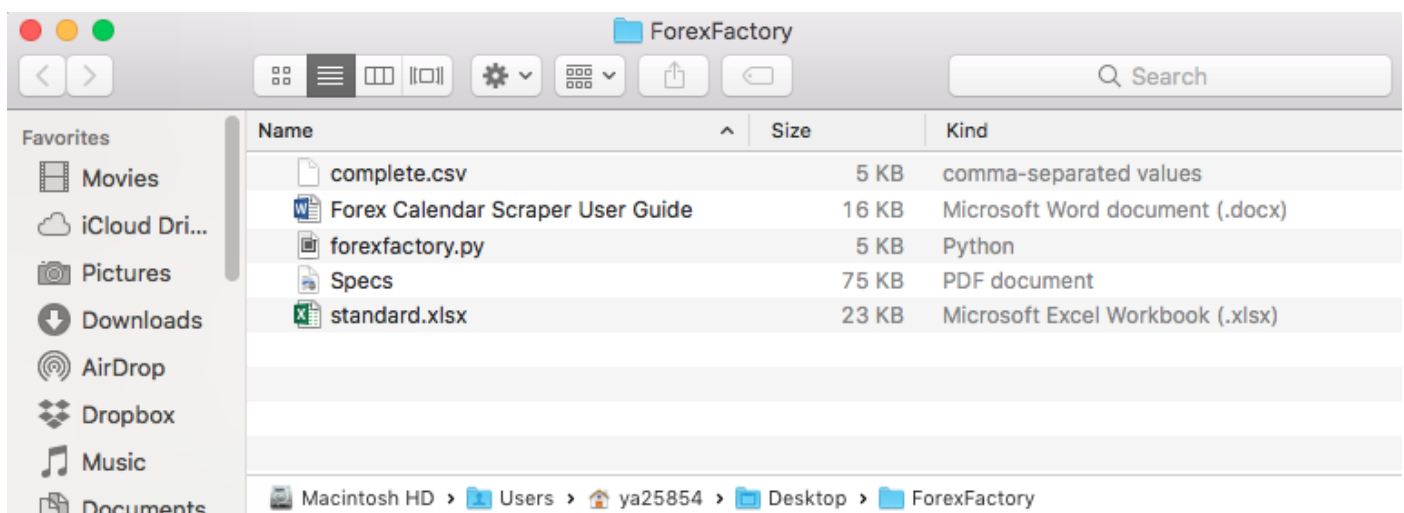
Use terminal to execute the program

```

ForexFactory — -bash — 80x24
Last login: Sat Jul 14 16:35:34 on ttys000
[James-3:~ ya25854$ cd Desktop/ForexFactory/
[James-3:ForexFactory ya25854$ python3 forexfactory.py --datefrom 20180430 --date
to 20180502 --outfile complete.csv
James-3:ForexFactory ya25854$

```

csv file generated at the folder where the program is located



Format of the csv file

	A	B	C	D	E	F	G	H
1	Date	Time	Currency	Impact	Event	Actual	Forecast	Previous
2	30-Apr-18	2:00am	EUR	medium	German Retail Sales m/m	-0.60%	0.80%	-0.20%
3	30-Apr-18	All Day	EUR	medium	German Prelim CPI m/m	0.00%	-0.10%	0.40%
4	30-Apr-18	3:00am	CHF	medium	KOF Economic Barometer	105.3	105.9	105.1
5	30-Apr-18	4:00am	EUR	medium	M3 Money Supply y/y	3.70%	4.10%	4.20%
6	30-Apr-18	4:00am	EUR	low	Private Loans y/y	3.00%	2.90%	2.90%
7	30-Apr-18	5:00am	EUR	low	Italian Prelim CPI m/m	0.10%	0.20%	0.30%
8	30-Apr-18	All Day	EUR	low	ECOFIN Meetings			
9	30-Apr-18	8:30am	CAD	medium	RMPI m/m	2.10%	0.60%	-0.40%
10	30-Apr-18	8:30am	CAD	low	IPPI m/m	0.80%	0.20%	0.30%
11	30-Apr-18	8:30am	USD	medium	Core PCE Price Index m/m	0.20%	0.20%	0.20%
12	30-Apr-18	8:30am	USD	medium	Personal Spending m/m	0.40%	0.40%	0.00%
13	30-Apr-18	8:30am	USD	low	Personal Income m/m	0.30%	0.40%	0.30%
14	30-Apr-18	9:45am	USD	medium	Chicago PMI	57.6	58.2	57.4
15	30-Apr-18	10:00am	USD	low	Pending Home Sales m/m	0.40%	0.60%	2.80%
16	30-Apr-18	2:30pm	CAD	high	BOC Gov Poloz Speaks			
17	30-Apr-18	6:30pm	AUD	low	AIG Manufacturing Index	58.3		63.1
18	30-Apr-18	6:45pm	NZD	low	Building Consents m/m	14.70%		6.40%
19	30-Apr-18	All Day	CNY	holiday	Bank Holiday			
20	30-Apr-18	8:30pm	JPY	low	Final Manufacturing PMI	53.8	53.3	53.3
21	1-May-18	12:30am	AUD	high	RBA Rate Statement			
22	1-May-18	12:30am	AUD	medium	Cash Rate	1.50%	1.50%	1.50%
23	1-May-18	All Day	CHF	holiday	Bank Holiday			
24	1-May-18	All Day	EUR	holiday	French Bank Holiday			
25	1-May-18	All Day	EUR	holiday	German Bank Holiday			
26	1-May-18	All Day	EUR	holiday	Italian Bank Holiday			
27	1-May-18	2:30am	AUD	low	Commodity Prices y/y	-1.40%		-2.80%
28	1-May-18	4:30am	GBP	high	Manufacturing PMI	53.9	54.8	54.9
29	1-May-18	4:30am	GBP	medium	Net Lending to Individuals m/m	4.2B	4.9B	5.5B
30	1-May-18	4:30am	GBP	low	M4 Money Supply m/m	-1.40%	0.20%	-0.40%
31	1-May-18	4:30am	GBP	low	Mortgage Approvals	63K	63K	64K
32	1-May-18	6:20am	AUD	high	RBA Gov Lowe Speaks			
33	1-May-18	8:30am	CAD	high	GDP m/m	0.40%	0.30%	-0.10%
34	1-May-18	9:30am	CAD	low	Manufacturing PMI	55.5		55.7
35	1-May-18	9:45am	USD	low	Final Manufacturing PMI	56.5	56.5	56.5
36	1-May-18	10:00am	USD	high	ISM Manufacturing PMI	57.3	58.4	59.3
37	1-May-18	10:00am	USD	low	Construction Spending m/m	-1.70%	0.50%	1.00%
38	1-May-18	10:00am	USD	low	ISM Manufacturing Prices	79.3	78.3	78.1
39	1-May-18	10:24am	NZD	medium	GDT Price Index	-1.10%		2.70%
40	1-May-18	All Day	USD	low	Total Vehicle Sales	17.2M	17.1M	17.5M
41	1-May-18	2:30pm	CAD	high	BOC Gov Poloz Speaks			
42	1-May-18	6:45pm	NZD	high	Employment Change q/q	0.60%	0.50%	0.40%
43	1-May-18	6:45pm	NZD	high	Unemployment Rate	4.40%	4.40%	4.50%
44	1-May-18	6:45pm	NZD	low	Labor Cost Index q/q	0.30%	0.50%	0.40%
45	1-May-18	7:01pm	GBP	low	BRC Shop Price Index y/y	-1.00%		-1.00%
46	1-May-18	7:50pm	JPY	low	Monetary Base y/y	7.80%	9.20%	9.10%
47	1-May-18	9:45pm	CNY	medium	Caixin Manufacturing PMI	51.1	50.9	51
48	2-May-18	1:02am	JPY	low	Consumer Confidence	43.6	44.6	44.3
49	2-May-18	1:45am	CHF	low	SECO Consumer Climate	2	5	5
50	2-May-18	3:15am	CHF	low	Retail Sales y/y	-1.80%	0.30%	-0.20%
51	2-May-18	3:15am	EUR	low	Spanish Manufacturing PMI	54.4	54.2	54.8
52	2-May-18	3:30am	CHF	low	Manufacturing PMI	63.6	59.9	60.3
53	2-May-18	3:45am	EUR	low	Italian Manufacturing PMI	53.5	54.4	55.1
54	2-May-18	3:50am	EUR	low	French Final Manufacturing PMI	53.8	53.4	53.4
55	2-May-18	3:55am	EUR	low	German Final Manufacturing PMI	58.1	58.1	58.1
56	2-May-18	4:00am	EUR	low	Final Manufacturing PMI	56.2	56	56

57	2-May-18	4:00am	EUR	low	Italian Monthly Unemployment Rate	11.00%	10.90%	11.00%
58	2-May-18	4:30am	GBP	high	Construction PMI	52.5	50.5	47
59	2-May-18	5:00am	EUR	medium	Prelim Flash GDP q/q	0.40%	0.40%	0.60%
60	2-May-18	5:00am	EUR	low	Italian Prelim GDP q/q	0.30%	0.30%	0.30%
61	2-May-18	5:00am	EUR	low	Unemployment Rate	8.50%	8.50%	8.50%
62	2-May-18	8:15am	USD	high	ADP Non-Farm Employment Change	204K	200K	228K
63	2-May-18	10:30am	USD	high	Crude Oil Inventories	6.2M	1.0M	2.2M
64	2-May-18	11:30am	EUR	medium	German Buba President Weidmann Speaks			
65	2-May-18	2:00pm	USD	high	FOMC Statement			
66	2-May-18	2:00pm	USD	high	Federal Funds Rate	<1.75%	<1.75%	<1.75%
67	2-May-18	6:30pm	AUD	low	AIG Services Index	55.2		56.9
68	2-May-18	All Day	JPY	holiday	Bank Holiday			
69	2-May-18	9:00pm	NZD	low	ANZ Commodity Prices m/m	1.00%		1.20%
70	2-May-18	9:30pm	AUD	high	Trade Balance	1.53B	0.68B	1.35B
71	2-May-18	9:30pm	AUD	medium	Building Approvals m/m	2.60%	1.10%	-4.20%



complete

