



Best Practices for Open Source Contributions: the Saga of a Single Line Change

Robert Buccigrossi, Ph.D.
CTO

My Problem (Cue the Violins)



Fund Details

SOCIAL SECURITY NUMBER: xxx-xx-xxxx
 VIEW: By Date
 SEARCH CRITERIA: Financial
 DATE FROM: 03/22/2019
 DATE TO: 06/19/2019

| DATE | NAME | TYPE | SOURCE | PRICE | UNITS | AMOUNT |
|------------|------------|---------------|--------------------------|-----------|---------|-----------|
| 06/17/2019 | Van500Indx | Contributions | SAFE HARBOR NON-ELECTIVE | \$ 123.45 | 2.71828 | \$ 234.56 |
| 06/17/2019 | Van500Indx | Contributions | EMPLOYEE 401(K) | \$ 234.56 | 3.14159 | \$ 345.67 |
| 05/31/2019 | Van500Indx | Contributions | SAFE HARBOR NON-ELECTIVE | \$ 123.45 | 2.71828 | \$ 234.56 |
| 03/22/2019 | Van500Indx | Dividend | EMPLOYER PROFIT SHARING | \$ 100.00 | 0.2500 | \$ 100.00 |

I Want My Retirement Data in Quicken!

Quicken

Investing

Market Value: \$218,159.91
 Day Gain/Loss: -\$868.30 -0.4%

Portfolio

Transactions

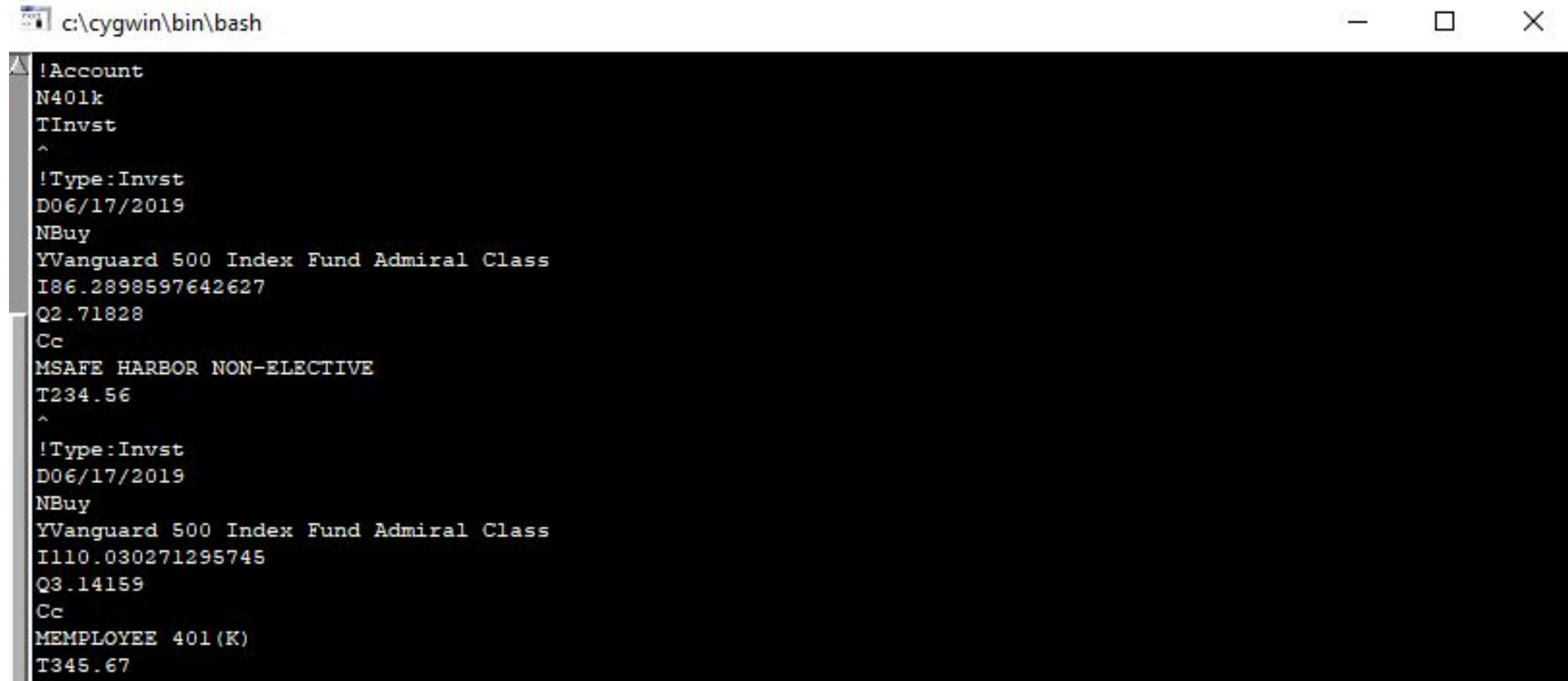
Price and Holdings as of 9/ 5/ 2018

YTD 1yr 3yr 5yr 10yr Max



| Name | Quote | Price Day Change | Price Day Change (%) | Shares | Cost Basis | Market Value | Gain/Loss | Gain/Loss (%) |
|-----------------|----------|------------------|----------------------|----------|--------------------|---------------------|---------------------|---------------|
| ▼ 401(k) | | | | | \$17,592.00 | \$106,109.91 | \$26,217.91 | 149.0% |
| ► Google Inc | 1,186.48 | -10.52 | -0.9% | 20.05491 | \$13,000.00 | \$23,794.75 | \$10,794.75 | 83.0% |
| ► Apple Inc | 226.87 | +1.49 | +0.7% | 48 | \$672.00 | \$10,889.76 | \$10,217.76 | 1,520.5% |
| ► Vanguard E... | 37.35 | -0.19 | -0.5% | 100 | \$3,500.00 | \$3,735.00 | \$235.00 | 6.7% |
| ► Jeff Bond | 95.00 | 0.00 | 0.0% | 50 | Ad5 | \$4,750.00 | \$4,750.00 | 0.0% |
| ► AT&T Inc | 32.02 | 0.16 | 0.5% | 20 | \$420.00 | \$640.40 | \$220.40 | 52.5% |
| Cash | | | | | | \$61,300.00 | | |
| ► Brokerage | | | | | \$0.00 | \$113,050.00 | \$112,050.00 | 0.0% |
| Totals | | | | | \$17,592.00 | \$218,159.91 | \$138,267.91 | 786.0% |

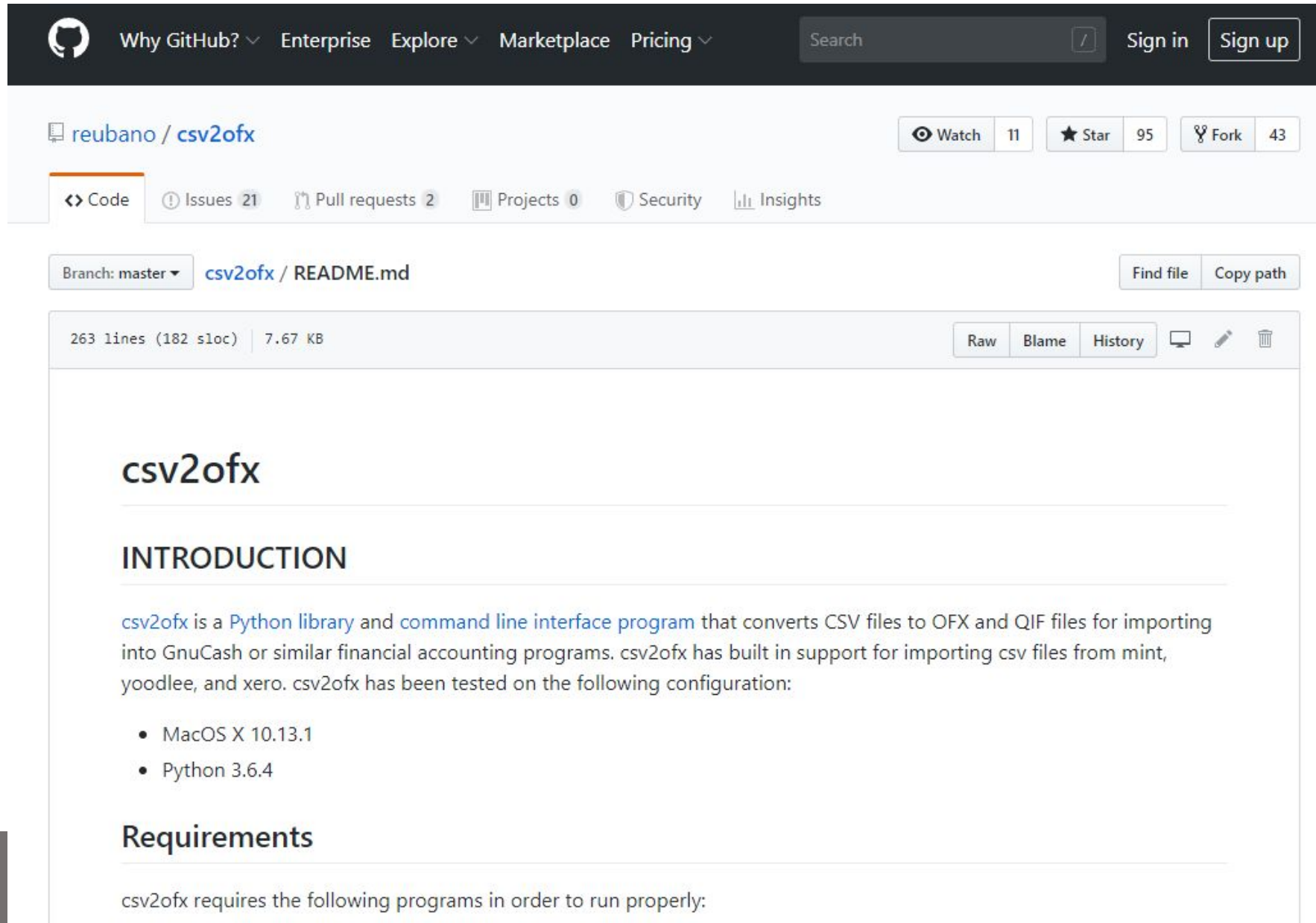
The Goal - QIF File Import



A screenshot of a Cygwin terminal window titled "c:\cygwin\bin\bash". The terminal displays a QIF file import process. The first transaction is a purchase of Vanguard 500 Index Fund Admiral Class on 06/17/2019 for \$186.29. The second transaction is a purchase of MSAFE HARBOR NON-ELECTIVE on 06/17/2019 for \$234.56. The third transaction is a purchase of Vanguard 500 Index Fund Admiral Class on 06/17/2019 for \$110.03. The fourth transaction is a purchase of MEMPLOYEE 401(K) on 06/17/2019 for \$345.67. The terminal output is as follows:

```
c:\cygwin\bin\bash
!Account
N401k
TInvst
^
!Type:Invst
D06/17/2019
NBuy
YVanguard 500 Index Fund Admiral Class
I86.2898597642627
Q2.71828
Cc
MSAFE HARBOR NON-ELECTIVE
T234.56
^
!Type:Invst
D06/17/2019
NBuy
YVanguard 500 Index Fund Admiral Class
I110.030271295745
Q3.14159
Cc
MEMPLOYEE 401(K)
T345.67
```

The Solution - OSS Python Project csv2ofx



Why GitHub? ▾ Enterprise Explore ▾ Marketplace Pricing ▾ Search / Sign in Sign up

reubano / csv2ofx

Watch 11 Star 95 Fork 43

Code Issues 21 Pull requests 2 Projects 0 Security Insights

Branch: master ▾ csv2ofx / README.md Find file Copy path

263 lines (182 sloc) | 7.67 KB Raw Blame History

csv2ofx

INTRODUCTION


csv2ofx is a [Python library](#) and [command line interface program](#) that converts CSV files to OFX and QIF files for importing into GnuCash or similar financial accounting programs. csv2ofx has built in support for importing csv files from mint, yoodlee, and xero. csv2ofx has been tested on the following configuration:

- MacOS X 10.13.1
- Python 3.6.4

Requirements

csv2ofx requires the following programs in order to run properly:

Step 1 - From Web Site to Google Sheet

 Vanguard

Home My Account Company Details

Fund Details

| SOCIAL SECURITY NUMBER | VIEW | SEARCH CRITERIA | DATE FROM | DATE TO |
|------------------------|---------|-----------------|------------|------------|
| xxx-xx-xxxx | By Date | Financial | 03/22/2019 | 06/19/2019 |

| DATE | NAME | TYPE | SOURCE | PRICE | UNITS | AMOUNT |
|------------|------------|---------------|--------------------------|-----------|---------|-----------|
| 06/17/2019 | Van500Indx | Contributions | SAFE HARBOR NON-ELECTIVE | \$ 123.45 | 2.71828 | \$ 234.56 |
| 06/17/2019 | Van500Indx | Contributions | EMPLOYEE 401(K) | \$ 234.56 | 3.14159 | \$ 345.67 |
| 05/31/2019 | Van500Indx | Contributions | SAFE HARBOR NON-ELECTIVE | \$ 123.45 | 2.71828 | \$ 234.56 |
| 03/22/2019 | Van500Indx | Dividend | EMPLOYER PROFIT SHARING | \$ 100.00 | 0.2500 | \$ 100.00 |

Vanguard Investment Conversion ☆

File Edit View Insert Format Data Tools Add-ons Help [All changes saved in Drive](#)

100% \$ % .0 .00 123 Arial 10 B I S A

| | A | B | C | D | E | F | G |
|---|------------|------------|---------------|-------------|----------|---------|----------|
| 1 | DATE | NAME | TYPE | SOURCE | PRICE | UNITS | AMOUNT |
| 2 | 06/17/2019 | Van500Indx | Contributions | SAFE HARBOR | \$123.45 | 2.71828 | \$234.56 |
| 3 | 06/17/2019 | Van500Indx | Contributions | EMPLOYEE 40 | \$234.56 | 3.14159 | \$345.67 |
| 4 | 05/31/2019 | Van500Indx | Contributions | SAFE HARBOR | \$123.45 | 2.71828 | \$234.56 |
| 5 | 05/31/2019 | Van500Indx | Dividend | EMPLOYER PR | \$100.00 | 0.25 | \$100.00 |
| 6 | | | | | | | |

Sheet1 mapping Sheet2

Cut and Paste

Step 2 - Use Google Sheet to Convert to CSV

The image displays two screenshots of a Google Sheet titled "Vanguard Investment Conversion".

The left screenshot shows a sheet with 4 columns: A (DATE), B (NAME), C (TYPE), and D (SOURCE). The data rows are:

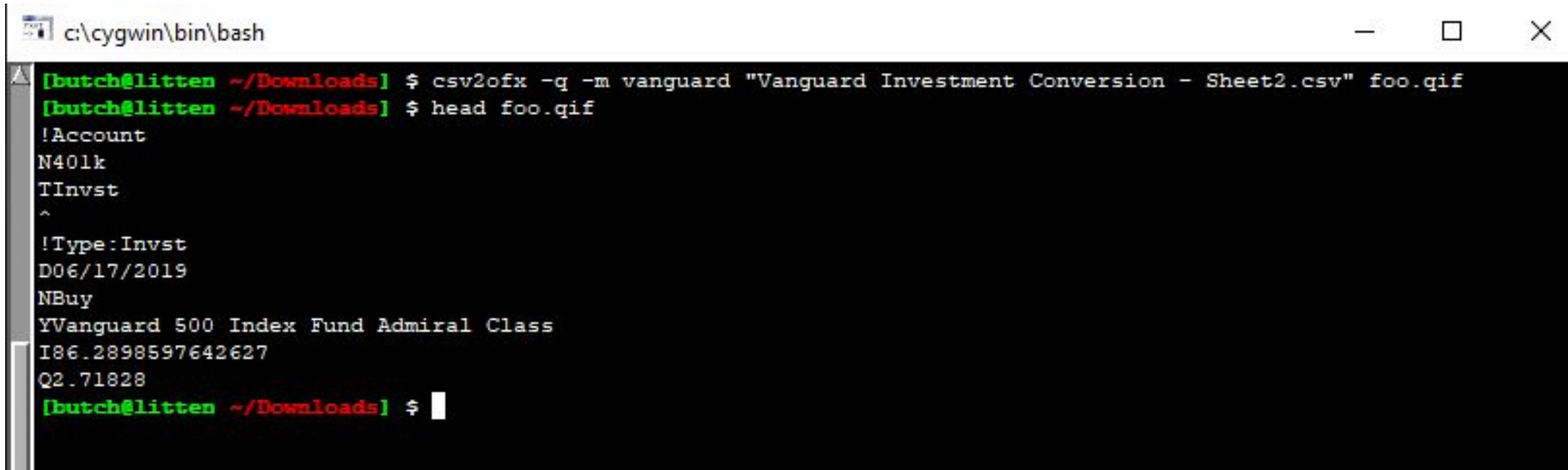
| | A | B | C | D |
|---|------------|------------|---------------|--------------|
| 1 | DATE | NAME | TYPE | SOURCE |
| 2 | 06/17/2019 | Van500Indx | Contributions | SAFE HARBOR |
| 3 | 06/17/2019 | Van500Indx | Contributions | EMPLOYEE 401 |
| 4 | 05/31/2019 | Van500Indx | Contributions | SAFE HARBOR |
| 5 | 05/31/2019 | Van500Indx | Dividend | EMPLOYER PR |
| 6 | | | | |

The right screenshot shows a sheet with 10 columns: A (Account), B (Date), C (Symbol), D (Action), E (Price), F (Units), G (Amount), H (Memo), and I (blank). The data rows are:

| | A | B | C | D | E | F | G | H | I |
|---|--------------|------------|-----------------|----------|----------------|---------|--------|--------------------------|---|
| 1 | Account | Date | Symbol | Action | Price | Units | Amount | Memo | |
| 2 | Butch 401(k) | 06/17/2019 | Vanguard 500 In | buy | 86.28985976426 | 2.71828 | 234.56 | SAFE HARBOR NON-ELECTIVE | |
| 3 | Butch 401(k) | 06/17/2019 | Vanguard 500 In | buy | 110.0302712957 | 3.14159 | 345.67 | EMPLOYEE 401(K) | |
| 4 | Butch 401(k) | 05/31/2019 | Vanguard 500 In | buy | 86.28985976426 | 2.71828 | 234.56 | SAFE HARBOR NON-ELECTIVE | |
| 5 | Butch 401(k) | 05/31/2019 | Vanguard 500 In | reinvest | 400. | 0.25 | 100. | EMPLOYER PROFIT SHARING | |
| 6 | | | | | | | | | |

- Sheet adds the price and correct column headings
- “Contributions” become “buy”
- “Dividend” becomes “reinvest”
- File -> Downloads as... -> Comma Separated Values

Step 3 - Use csv2ofx to Convert to QIF

A terminal window titled 'c:\cygwin\bin\bash' with standard window controls. The prompt is '[butch@litten ~/Downloads]'. The first command is '\$ csv2ofx -q -m vanguard "Vanguard Investment Conversion - Sheet2.csv" foo.qif'. The second command is '\$ head foo.qif'. The output of the 'head' command is displayed as follows:

```
!Account
N401k
TInvst
^
!Type:Invst
D06/17/2019
NBuy
YVanguard 500 Index Fund Admiral Class
I86.2898597642627
Q2.71828
```

The prompt is now '\$' with a cursor.

Yay! Now we can import foo.qif into Quicken... but...

The Bug - Reinvest not Converted Correctly

| | | | | | | | |
|---|--------------|------------|---------------------------|----------------|---------|--------|--------------------------|
| 4 | Butch 401(k) | 05/31/2019 | vanguard 500 inv buy | 00.20000070420 | 2.71020 | 234.50 | SALE HARBOR NON-ELECTIVE |
| 5 | Butch 401(k) | 05/31/2019 | Vanguard 500 Inv reinvest | 400. | 0.25 | 100. | EMPLOYER PROFIT SHARING |
| 6 | | | | | | | |

```
1234.50
^
!Type:Invst
D05/31/2019
NBuy
Vanguard 500 Index Fund Admiral Class
I400
Q0.25
Cc
MEMPLOYER PROFIT SHARING
T100.00
^
```

This should be “NReinvDiv”,
not “NBuy”

Fixing the Bug -- a “One Line” Change



Well, There's Your Problem...

```
28 ACTION_TYPES = {
29     'ShrsIn': ('deposit',),
30     'ShrsOut': ('withdraw',),
31     'Buy': ('buy', 'invest'),
32     'Div': ('dividend',),
33     'Int': ('interest',),
34     'Sell': ('sell',),
35     'ReinvDiv': ('reinvest',),
36     'StkSplit': ('split',),
37 }
```

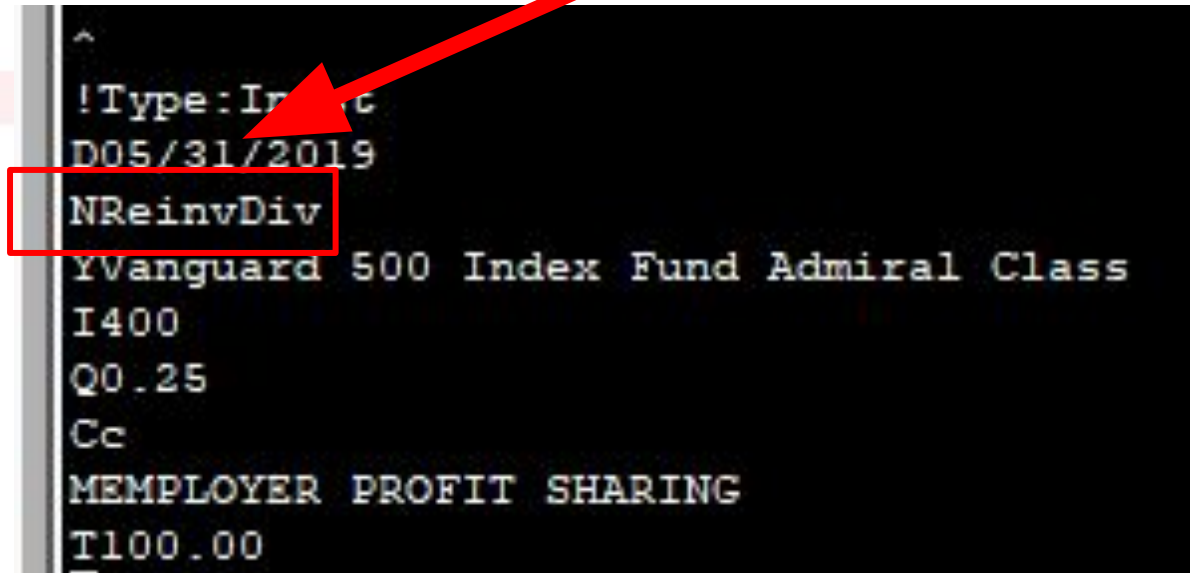
```
89 for key, values in ACTION_TYPES.items():
90     if any(v in category.lower() for v in values):
91         _type = key
92         break
93
```

Looking for “reinvest” in ACTION_TYPES can match “invest” first because it looks for a substring match

My First Fix: Move “reinvest” above “invest”

```
28 28 ACTION_TYPES = {
29 29     'ShrsIn': ('deposit',),
30 30     'ShrsOut': ('withdraw',),
31 31     + 'ReinvDiv': ('reinvest',),
32 32     'Buy': ('buy', 'invest'),
33 33     'Div': ('dividend',),
34 34     'Int': ('interest',),
35 35     'Sell': ('sell',),
36 36     - 'ReinvDiv': ('reinvest',),
37 37     'StkSplit': ('split',),
38 38 }
```

And it works on my system...



```
^
!Type: Invc
D05/31/2019
NReinvDiv
YVanguard 500 Index Fund Admiral Class
I400
Q0.25
Cc
MEMPLOYER PROFIT SHARING
T100.00
```

Hey Python experts, I know you see the problem! Just wait...

Now to Fix... and Contribute to OSS!



Fork the Project on Github

The screenshot shows the GitHub repository page for `reubano / csv2ofx`. The browser address bar shows the URL `https://github.com/reubano/csv2ofx`. The repository page includes a search bar, navigation links for Pull requests, Issues, Marketplace, and Explore, and a notification bell. The repository name `reubano / csv2ofx` is displayed, along with the number of watchers (11), stars (95), and forks (43). The `Fork` button is highlighted with a red box and a red arrow pointing to it. Below the repository name, there are tabs for Code, Issues (21), Pull requests (2), Projects (0), Wiki, Security, and Insights. The description of the repository is "A Python library and command line tool for converting csv to ofx and qif files". Below the description, there are tags for `csv`, `ofx`, `qif`, `library`, `cli`, `finance`, `data`, and `featured`. At the bottom, there is a bar showing repository statistics: 549 commits, 5 branches, 31 releases, 13 contributors, and MIT license.

Now I Have a Copy

← → ↻ 🏠 🔒 GitHub, Inc. [US] | https://github.com/rbuccigrossi/csv2ofx ☆ 🌐 📄 📡 📺 📧 👤

🎨 Apps 🔄 Close Kongregate Ad 🔄 Approve Timesheet 🔄 Accept ALL 👤 MAX Milestones an... 🏠 MyFitnessPal 📱 Candy Crush Saga... » 📁 Other bookmark

🐙 Search or jump to... / Pull requests Issues Marketplace Explore 🔔 + 👤

🐙 rbuccigrossi / csv2ofx
forked from reubano/csv2ofx

👁 Unwatch ▾ 1 ★ Star 0 🍴 Fork 43

↔ Code 📄 Pull requests 0 📁 Projects 0 📖 Wiki 🛡 Security 📊 Insights ⚙ Settings

A Python library and command line tool for converting csv to ofx and qif files [Edit](#)







[Manage topics](#)

🕒 552 commits 🌿 5 branches 📦 31 releases 👥 12 contributors 📄 MIT

Branch: master ▾ New pull request Create new file Upload files Find File [Clone or download ▾](#)

This branch is 4 commits ahead, 1 commit behind reubano:master. [Pull request](#) [Compare](#)

But Look, They Use Travis...

| | |
|---|---|
|  .gitignore | Add PC Financial Mastercard (Canada) (reubano#50) |
|  .pyup.yml | create pyup.io config file |
|  .travis.yml | Rollback pypy test change |
|  LICENSE | First conversion pass |
|  MANIFEST.in | Update setup |
|  README.md | Add PC Financial Mastercard (Canada) (reubano#50) |

- Travis CI (<https://travis-ci.org/>) can be used to automatically run unit tests
- Free for open source projects
- `.travis.yml` gives Travis CI build and test instructions

Peering into the .travis.yml File

49 lines (40 sloc) | 879 Bytes

```
1 sudo: false
2 language: python
3 python:
4   - "2.7"
5   - "3.5"
6   - "3.6"
7   - "pypy"
8   - "pypy3.5"
```

What Travis Docker image to use

What versions of Python to test

```
27
28 before_install:
29   - pip install -U pip
30   - pip install wheel
31
32 install:
33   - pip install -r dev-requirements.txt
34   - |
35     if [[ $TRAVIS_PYTHON_VERSION == *"3"* ]]; then
36       pip install -r requirements.txt
37     else
38       pip install -r py2-requirements.txt
39     fi
```

Additional commands to set up the environment
(before travis checks out the code)

Any additional setup after git
checkout but before running tests


```
40
41 script:
42   - manage lint
43   - manage test
```

Tests to be run (what is “manage”?)

Register with Travis, and Test it Out

 <https://travis-ci.org/account/repositories>

- Log into Travis with your Github repository
- Grant permissions
- Click on your account settings and turn on your repository

 Robert W. Buccigrossi,
@rbuccigrossi

[Repositories](#) [Settings](#)

We're only showing your public repositories. You can find your private projects on travis-ci.com.

Legacy Services Integration

 Filter repositories

| | | |
|---|-------------------------------------|--|
|  Anywhere_Board_Games | <input type="checkbox"/> |  Settings |
|  boggle | <input type="checkbox"/> |  Settings |
|  csv2ofx | <input checked="" type="checkbox"/> |  Settings |

Make a Change and Watch Travis Run

rbuccigrossi / csv2ofx
forked from reubano/csv2ofx

Unwatch 1 Star 0 Fork 43

Code Pull requests 0 Projects 0 Wiki Security Insights Settings

Branch: master

Commits on Mar 1, 2019

Temporarily remove pypy to test travis
Robert Buccigrossi committed on Mar 1 ✓

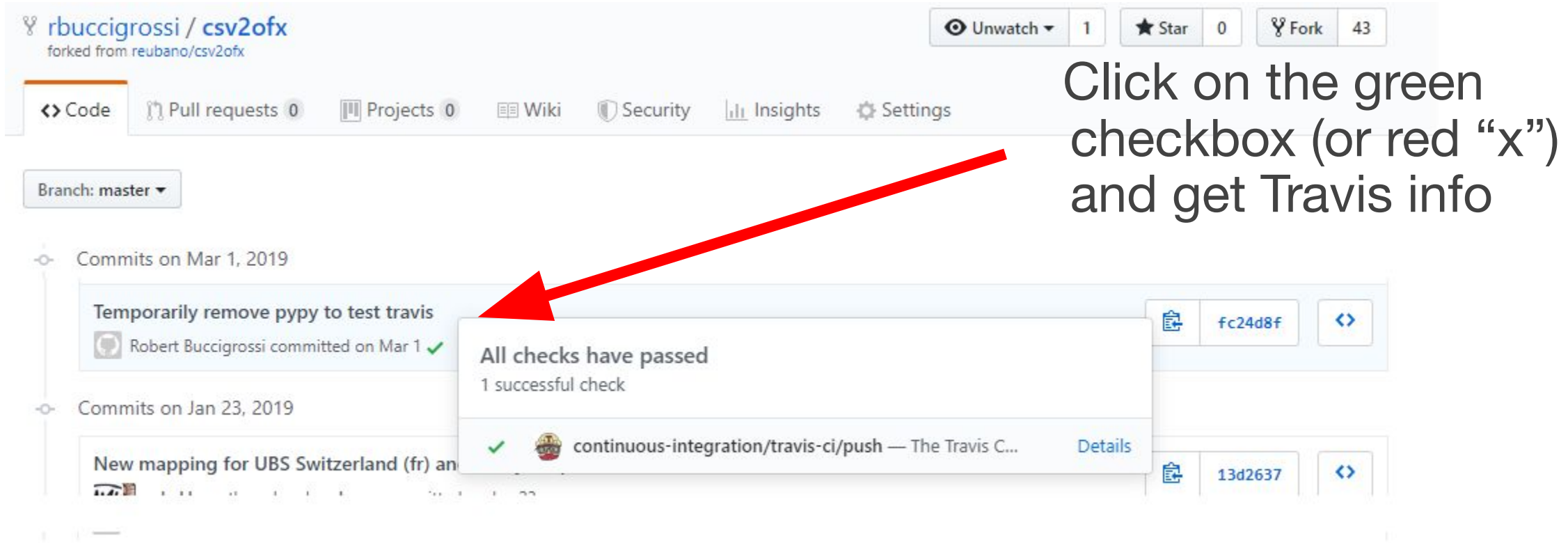
Commits on Jan 23, 2019

New mapping for UBS Switzerland (fr) and

All checks have passed
1 successful check

continuous-integration/travis-ci/push — The Travis C... Details

Click on the green checkbox (or red “x”) and get Travis info



“Details” Leads to Full Travis Job Output

rbuccigrossi / csv2ofx

build passing

Current

Branches

Build History

Pull Requests

Build #1

✓ master Temporarily remove pypy to test travis

🔗 Commit fc24d8f

🔗 Compare 13d2637..fc24d8f

🔗 Branch master

👤 Robert W. Buccigrossi, Ph.D.

#1 passed

🕒 Ran for 1 min 39 sec

🕒 Total time 3 min 58 sec

📅 4 months ago

Build jobs

View config

| | | |
|---------|-------------------|--------------------------------|
| ✓ # 1.1 | 🐍 </> Python: 2.7 | 📦 no environment variables set |
| ✓ # 1.2 | 🐍 </> Python: 3.5 | 📦 no environment variables set |
| ✓ # 1.3 | 🐍 </> Python: 3.6 | 📦 no environment variables set |

</> Python: 3.6

Job log

View config

✕ Remove log

⌵ Raw log

```
1 Worker information
6 Build system information
413
414
415 $ git clone --depth=50 --branch=master https://github.com/rbuccigrossi/csv2ofx.git
425
426
427 Setting environment variables from .travis.yml
428 $ export PIP_WHEEL_DIR=$HOME/.cache/pip/wheels
429 $ export PIP_FIND_LINKS=file://$HOME/.cache/pip/wheels
430 $ export PYTHONHASHSEED=94967295
431
432 $ source ~/virtualenv/python3.6/bin/activate
433 Setting up build cache
441
442 $ python --version
443 Python 3.6.3
444 $ pip --version
445 pip 9.0.1 from /home/travis/virtualenv/python3.6.3/lib/python3.6/site-packages (python 3.6)
446 $ pip install -U pip
447 $ pip install wheel
448 $ pip install -r dev-requirements.txt
449
450 $ if [[ $TRAVIS_PYTHON_VERSION == "3.6" ]]; then
451     $ manage lint
452     Using config file /home/travis/build/rbuccigrossi/csv2ofx/tests/standard.rc
453
454     -----
455     Your code has been rated at 10.00/10
456
457     The command "manage lint" exited with 0.
458
459 $ manage test
```

.travis.yml Tells Me How to Run Tests Locally

49 lines (40 sloc) | 879 Bytes

```
1  sudo: false
2  language: python
3  python:
4    - "2.7"
5    - "3.5"
6    - "3.6"
7    - "pypy"
8    - "pypy3.5"
27
28  before_install:
29    - pip install -U pip
30    - pip install wheel
31
32  install:
33    - pip install -r dev-requirements.txt
34    - |
35      if [[ $TRAVIS_PYTHON_VERSION == *"3"* ]]; then
36        pip install -r requirements.txt
37      else
38        pip install -r py2-requirements.txt
39      fi
40
41  script:
42    - manage lint
43    - manage test
```

Make a Test VirtualEnv

```
virtualenv --python=/usr/bin/python3 test_csv
. test_csv/bin/activate
```

Do Travis' pre installation commands

```
pip install -U pip
pip install wheel
```

Get the source code

```
git clone https://github.com/rbuccigrossi/csv2ofx.git
cd csv2ofx
```

Do Travis' install commands

```
pip install -r dev-requirements.txt
pip install -r requirements.txt
```

Now run Travis' script commands (to actually test)

```
manage lint
manage test
```

To exit virtualenv

```
deactivate
```

?

manage.py is a “Human Friendly CLI Builder”

```
90 def test(where=None, stop=None, **kwargs):
91     """Run nose, tox, and script tests"""
92     opts = '-xv' if stop else '-v'
93     opts += ' --with-coverage' if kwargs.get('cover') else ''
94     opts += ' --failed' if kwargs.get('failed') else ' --with-id'
95     opts += ' --processes=-1' if kwargs.get('parallel') else ''
96     opts += ' --detailed-errors' if kwargs.get('verbose') else ''
97     opts += ' --debug=nose.loader' if kwargs.get('debug') else ''
98     opts += ' -w %s' % where if where else ''
99
100     try:
101         if kwargs.get('tox'):
102             check_call('tox')
103         elif kwargs.get('detox'):
104             check_call('detox')
105         else:
106             check_call(('nosetests %s' % opts).split(' '))
107             check_call(['python', p.join(BASEDIR, 'tests', 'test.py')])
108     except CalledProcessError as e:
109         exit(e.returncode)
110
```

So “manage test” runs:

`nosetest -v`

`python tests/test.py`

So I can use doctests or
add tests to
`tests/test.py`

Make My Test and Fail

```
69 69 def get_action(category, transfer=False, def_action='S
70 70 """ Detect the investment action of a given catego
71 71
72 72 Args:
73 73     category (str): The transaction category.
74 74     transfer (bool): Is the transaction an account
75 75         False)
76 76     def_type (str): The default action.
77 77
78 78 Returns:
79 79     (str): The resulting action.
80 80
81 81 Examples:
82 82     >>> get_action('dividend & cap gains') == 'Div
83 83     True
84 84     >>> get_action('buy', True) == 'BuyX'
85 85     True
86 86 +     >>> get_action('invest') == 'Buy'
87 87 +     True
88 88 +     >>> get_action('reinvest') == 'ReinvDiv'
89 89 +     True
90 90 """
```

```
(test_csv) [butch@litten ~/csv2ofx] $ nosetests
.....F.....n...
=====
FAIL: Doctest: csv2ofx.utils.get_action
=====
Traceback (most recent call last):
  File "/usr/lib/python3.6/doctest.py", line 2199, in runTest
    raise self.failureException(self.format_failure(new.getvalue()))
AssertionError: Failed doctest test for csv2ofx.utils.get_action
  File "/home/butch/csv2ofx/csv2ofx/utils.py", line 73, in get_action
=====
File "/home/butch/csv2ofx/csv2ofx/utils.py", line 92, in csv2ofx.utils.get_action
Failed example:
    get_action('reinvest') == 'ReinvDiv'
Expected:
    True
Got:
    False
=====
Ran 26 tests in 0.155s

FAILED (failures=1)
```


Make My Fix and Pass

```
✓ 6 csv2ofx/utils.py
```


| 28 | 28 | @@ -28,11 +28,11 @@ |
|----|----|----------------------------|
| 28 | 28 | ACTION_TYPES = { |
| 29 | 29 | 'ShrsIn': ('deposit',), |
| 30 | 30 | 'ShrsOut': ('withdraw',), |
| 31 | 31 | 'ReinvDiv': ('reinvest',), |
| 31 | 32 | 'Buy': ('buy', 'invest'), |
| 32 | 33 | 'Div': ('dividend',), |
| 33 | 34 | 'Int': ('interest',), |
| 34 | 35 | 'Sell': ('sell',), |
| 35 | 35 | 'ReinvDiv': ('reinvest',), |
| 36 | 36 | 'StkSplit': ('split',), |
| 37 | 37 | } |
| 38 | 38 | |

```
(test_csv) [butch@litten ~/csv2ofx] $ nosetests
.....
Ran 26 tests in 0.150s

OK
(test_csv) [butch@litten ~/csv2ofx] $ python tests/test.py
Scripttest #1: csv2ofx --help ... ok
Scripttest #2: csv2ofx -oq "/home/butch/csv2ofx/data/test/default.csv" ... ok
Scripttest #3: csv2ofx -oq -m split_account "/home/butch/csv2ofx/data/test/default.csv" ... ok
Scripttest #4: csv2ofx -oqc Description -m xero "/home/butch/csv2ofx/data/test/xero.csv" ... ok
Scripttest #5: csv2ofx -oq -m mint "/home/butch/csv2ofx/data/test/mint.csv" ... ok
Scripttest #6: csv2ofx -oq -m mint_headerless "/home/butch/csv2ofx/data/test/mint_headerless.csv" ... ok
Scripttest #7: csv2ofx -oqs20150613 -e20150614 -m mint "/home/butch/csv2ofx/data/test/mint.csv" ... ok
Scripttest #8: csv2ofx -oe 20150908 -D 20161031112908 "/home/butch/csv2ofx/data/test/default.csv" ... ok
Scripttest #9: csv2ofx -o -m split_account -D 20161031112908 "/home/butch/csv2ofx/data/test/default.csv" ... ok
Scripttest #10: csv2ofx -o -m mint -D 20161031112908 "/home/butch/csv2ofx/data/test/mint.csv" ... ok
Scripttest #11: csv2ofx -oq -m creditunion "/home/butch/csv2ofx/data/test/creditunion.csv" ... ok
Scripttest #12: csv2ofx -E windows-1252 -m gls -D 20161031112908 -e 20171111 -o "/home/butch/csv2ofx/data/test/windows-1252.csv" ... ok
Scripttest #13: csv2ofx -o -m pcmastercard -e 20190120 -D 20161031112908 "/home/butch/csv2ofx/data/test/mastercard.csv" ... ok
Ran 13 scripttests in 4.335s

OK
(test_csv) [butch@litten ~/csv2ofx] $
```

Push to Gitlab and Watch Travis Pass

rbuccigrossi / csv2ofx  build passing


Current Branches Build History Pull Requests > Build #3 More options

✓ **master** Reordered ACTION_TYPES to allow reinvestme #3 passed Restart build

Commit 5477d42 [↗](#)

Compare 28dba50...5477d42 [↗](#)

Branch master [↗](#)
















 Robert W. Buccigrossi, Ph.D.

Ran for 1 min 19 sec

Total time 7 min 12 sec

4 months ago

[Build jobs](#) [View config](#)

| | | | | |
|---------|---|--|----------------|---|
| ✓ # 3.1 |  </> Python: 2.7 |  no environment variables set | 🕒 1 min 6 sec |  |
| ✓ # 3.2 |  </> Python: 3.5 |  no environment variables set | 🕒 1 min 19 sec |  |
| ✓ # 3.3 |  </> Python: 3.6 |  no environment variables set | 🕒 1 min 6 sec |  |
| ✓ # 3.4 |  </> Python: pypy |  no environment variables set | 🕒 1 min 21 sec |  |
| ✓ # 3.5 |  </> Python: pypy3.5 |  no environment variables set | 🕒 2 min 20 sec |  |

Make a Pull Request... and Get Feedback!

Quick fix to allow "reinvest" category #58

Merged

reubano merged 4 commits into reubano:m

Conversation 6

Commits 4

Check



rbuccigrossi commented on Mar 1



reubano reviewed on Mar 1

[View changes](#)

csv2ofx/utils.py

```
31 32      'Buy': ('buy', 'invest'),
32 33      'Div': ('dividend',),
33 34      'Int': ('interest',),
34 35      'Sell': ('sell',),
35 -      'ReinvDiv': ('reinvest',),
36 36      'StkSplit': ('split',),
37 37  }
38 38
```



reubano on Mar 1 Owner

+ 😊 ...

Since dictionaries are unordered, this shouldn't actually make a difference should it??



rbuccigrossi on Mar 1 • edited ▾ Author Contributor

+ 😊 ...

You're right: Python does not guarantee the order of the keys or values. As it turns out in Python 2.7.14 with the default configuration, it iterated over the keys in the order of the code, and thus my fix worked. If you ran this in CPython, you will get it in whatever order it represents the keys.

So the *real* fix would be for me to use an OrderedDict from the python collections module to force a specific order so that the substring matching will hit the larger string first...

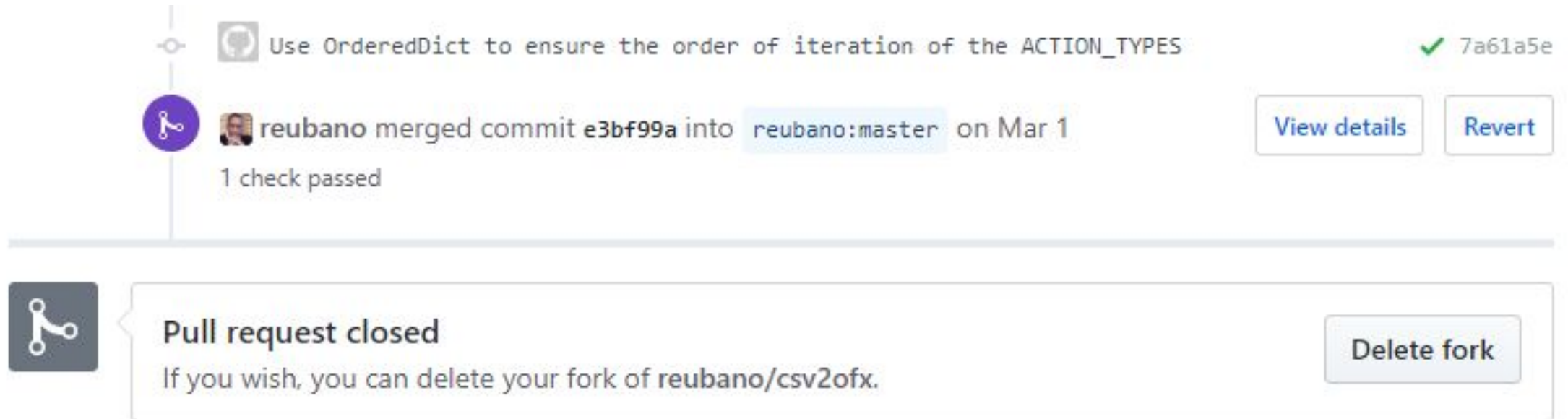
Time to update my pull request :)

Fix my Fix

```
28 - ACTION_TYPES = {
29 -     'ShrsIn': ('deposit',),
30 -     'ShrsOut': ('withdraw',),
31 -     'ReinvDiv': ('reinvest',),
32 -     'Buy': ('buy', 'invest'),
33 -     'Div': ('dividend',),
34 -     'Int': ('interest',),
35 -     'Sell': ('sell',),
36 -     'StkSplit': ('split',),
37 - }

27 + from collections import OrderedDict
28 +
29 + # NOTE: Because we are testing for substrings, the order we iterate
30 + # over this dictionary matters (so place strings like "reinvest"
31 + # above substrings like "invest")
32 + ACTION_TYPES = OrderedDict([
33 +     ('ShrsIn', ('deposit',)),
34 +     ('ShrsOut', ('withdraw',)),
35 +     ('ReinvDiv', ('reinvest',)),
36 +     ('Buy', ('buy', 'invest',)),
37 +     ('Div', ('dividend',)),
38 +     ('Int', ('interest',)),
39 +     ('Sell', ('sell',)),
40 +     ('StkSplit', ('split',)),
41 + ])
```

Commit (Auto Updates Pull-Requests!), Pass Travis, and Get Merged!



The screenshot shows a GitHub commit history and a pull request status. The commit history includes a commit titled "Use OrderedDict to ensure the order of iteration of the ACTION_TYPES" with a green checkmark and hash 7a61a5e. Below it, a pull request is shown where user reubano merged commit e3bf99a into reubano:master on Mar 1, with a note "1 check passed". To the right of the merge are buttons for "View details" and "Revert". Below the commit history, a message box states "Pull request closed" and "If you wish, you can delete your fork of reubano/csv2ofx.", with a "Delete fork" button.

Use OrderedDict to ensure the order of iteration of the ACTION_TYPES ✓ 7a61a5e

reubano merged commit e3bf99a into reubano:master on Mar 1
1 check passed

[View details](#) [Revert](#)

Pull request closed
If you wish, you can delete your fork of reubano/csv2ofx. [Delete fork](#)

Summary of Ideas

- Fork: Clones a repository so you can make and test changes independently from other developers
- Expect continuous integration (CI) such as Travis CI for automated testing
- CI files (.travis.yml, .gitlab-ci.yml, or .circleci/setup.yml) tell you how to build and test
- Test driven development (make test, fail test, fix, pass test)
- Pull request (“merge request” in Gitlab): Request that changes be accepted to another repository
 - You are requesting that they “pull” in your changes
- Expect feedback on pull requests
- Celebrate contributing to the OSS community!



Questions?

INTERESTING CONFUSIONS

1. Can you cry under water?
2. Do fishes ever get thirsty?
3. Why don't birds fall off trees when they sleep?
4. Why is it called building when it is already built?
5. When they say dogs food is new and improved, who tastes it?
6. If money doesn't grow on trees, why do banks have branches?
7. Why does round pizza come in square box?
8. Why doesn't glue stick to its bottle?

