



Prophet

Prophet is a Python microframework for financial markets. Prophet strives to let the programmer focus on modeling financial strategies, portfolio management, and analyzing backtests. It achieves this by having few functions to learn to hit the ground running, yet being flexible enough to accomodate sophistication.

build unknown

Prophet is Python 2 and 3 compatible. See the documentation for more details.

Join the mailing list [here](#) or join by email. See the development board to see what's currently in the works.

Installation

```
1 # sudo easy_install pip
2 pip install prophet
```

Quickstart

```
1 from datetime import datetime
2
3 from prophet import Prophet
4 from prophet.data import YahooCloseData
5 from prophet.analyze import default_analyzers
6 from prophet.orders import Orders
7
8
9 class OrderGenerator(object):
```

```

10
11     def run(self, prices, timestamp, cash, **kwargs):
12         symbol = "AAPL"
13         orders = Orders()
14         if (prices.loc[timestamp, symbol] * 100) < cash:
15             orders.add_order(symbol, 100)
16
17         return orders
18
19
20 prophet = Prophet()
21 prophet.set_universe(['AAPL', 'XOM'])
22
23 prophet.register_data_generators(YahooCloseData())
24 prophet.set_order_generator(OrderGenerator())
25 backtest = prophet.run_backtest(start=datetime(2010, 1, 1))
26
27 prophet.register_portfolio_analyzers(default_analyzers)
28 analysis = prophet.analyze_backtest(backtest)
29 print(analysis)
30 # +-----+
31 # | sharpe           | 1.09754359611 |
32 # | average_return   | 0.00105478425027 |
33 # | cumulative_return | 2.168833 |
34 # | volatility       | 0.0152560508189 |
35 # +-----+
36
37 # Generate orders for you to execute today
38 # Using Nov, 10 2014 as the date because there might be no data for
39 # today's
40 # date (Market might not be open) and we don't want examples to fail.
41 today = datetime(2014, 11, 10)
42 print(prophet.generate_orders(today))
43 # Orders[Order(symbol='AAPL', shares=100)]

```

Contribute

Run the following to your development environment setup:

```

1 git clone git@github.com:Emsu/prophet.git
2 cd prophet
3 virtualenv env
4 . env/bin/activate
5 pip install -r dev-requirements.txt
6 python setup.py develop

```

Credits

Prophet wouldn't be possible without the wonderful pandas library and is inspired by QSTK and Zipline. The trading calendar util in Prophet is from Zipline which is under the Apache 2.0 License.