



Portfolio Management Tool

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Jack Chen, William Frame, Vincent Lan, Junhao Zhang,
Aniruddha Dutta, Samuel Perebikovsky

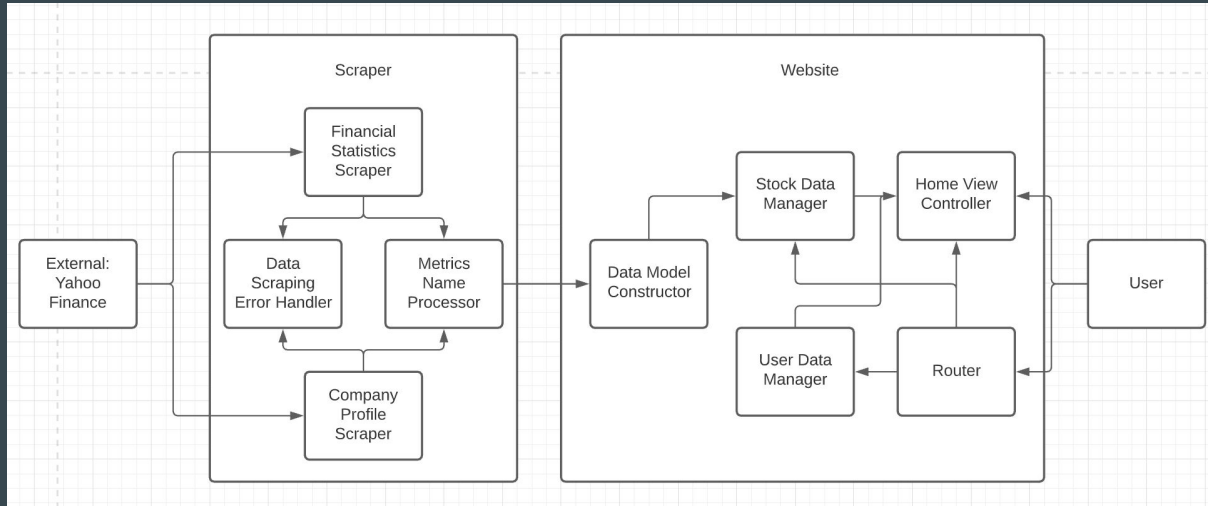
Background

Investment portfolio management tools are increasingly ubiquitous. Many retail investors use trading platforms like Robinhood and Etrade to manage their stock portfolio. However, these retail trading platforms do not extend well into portfolio management. While institutional investors have strong portfolio management tools, these have not been shared with the retail investor. There are adequate local solutions but no viable global alternatives. Through this project, we want to provide a portfolio where users can have a one-stop shop where users can monitor their investment and conduct initial due diligence on new investment opportunities.



Users & Design

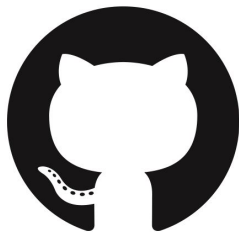
- User profile: Someone with a basic understanding of the stock market, portfolio management, and company valuation will be able to get the most use from the program
- Website side vs. Scraper side
 - Dashboard view of important features of user's stocks on website side
 - Scraper interacting with Yahoo Finance to gather all information that will be on the dashboard



Demo

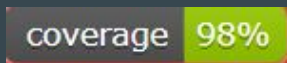
Structure of Repository:

```
Portfolio-Management/  
├── Doc  
│   └── FinalPresentation.pdf  
├── .gitignore  
├── .travis.yml  
├── README.md  
├── __init__.py  
├── requirements.txt  
├── run_program.sh  
├── scraping  
│   ├── __init__.py  
│   ├── clients.py  
│   ├── constants.py  
│   ├── errors.py  
│   ├── metrics_string_process.py  
│   ├── scraper.py  
│   └── tests  
│       ├── __init__.py  
│       ├── data  
│       │   ├── invalid_key_statistics_url_  
│       │   ├── invalid_key_statistics_url_  
│       │   ├── invalid_profile_url_text.ht  
│       │   ├── invalid_profile_url_text_no_  
│       │   ├── valid_key_statistics_url_te  
│       │   └── valid_profile_url_text.html  
│       └── test_scraper.py  
├── setup.py  
└── stocks  
    ├── __init__.py  
    ├── db.sqlite3  
    ├── errors.py  
    ├── manage.py  
    ├── quotes  
    │   ├── __init__.py  
    │   ├── admin.py  
    │   ├── apps.py  
    │   ├── dashboard.html  
    │   ├── forms.py  
    │   ├── migrations  
    │   │   ├── 0001_initial.py  
    │   │   └── __init__.py  
    │   ├── models.py  
    │   ├── templates  
    │   │   ├── about.html  
    │   │   └── base.html
```



Test Coverage

Overall: 98%



Scraper: 98%

Web Hosting: Mostly Excluded from Testing

Pylint, Flake8 Included in Continuous Testing

Lessons Learned - Challenges

- Six People in Tight Spaces
- Continuous Integration - Travis Configuration
- Merge conflicts in git are annoying
- Django Framework
- Pylint and Flake8



Future Steps

- Visualization of Portfolio
- Caching Homepage
- User Customize Dashboard Columns
- Linking to Brokerage
- Real Time Data -- bs4 Performance

THANK YOU!