groupby

a command line tool for summarizing personal social media data

Avanti Chande · Pranay Agarwal · Jacob Cannella Kovacs · Shrawan Sher · Shibashish Hota

Social Media Analytics: 26 Free Analytics Tools for Marketers
https://blog.bufferapp.com/social-media-analytics-tools ▾
Mar 7, 2017 - 19 Free **Social Media Analytics** Tools. Buffer. With Buffer's free plan, you get all the major engagement stats for every update you post on Facebook, Twitter, Google+, and LinkedIn. Followerwonk. ViralWoot. Google **Analytics**. Quintly. Cyfe. Tailwind. Keyhole.

Top 25 Social Media Analytics Tools for Marketers - Keyhole
keyhole.co/blog/list-of-the-top-25-social-media-analytics-tools/ ▾
Jan 19, 2016 - AgoraPulse. This image was taken from the AgoraPulse homepage. Brandwatch. Offering a suite of tools that work across major **social media** platforms, Brandwatch is perhaps best used as a research suite. Buffer. BuzzSumo. Crowdbooster. Edgar. Google **Analytics**. Hootsuite.

Social media analytics - Wikipedia
https://en.wikipedia.org/wiki/Social_media_analytics ▾
Social Media Analytics as a part of social analytics is the process of gathering data from stakeholder conversations on digital media and processing into structured insights leading to more information-driven business decisions and increased customer centrality for brands and businesses. "**Social Media Analytics** is the art ...
Seven layers · Social Media Analytics ... · Role in business ... · Analytical tools

8 of the Best Social Media Analytics Tools of 2017 | Sprout Social
https://sproutsocial.com › Sprout Blog › Analytics ▾
Oct 16, 2017 - By now, most marketers understand the need for tools to measure their efforts. But as social media marketing has grown, the number of tools available to analyze your efforts has skyrocketed. At one point, you could probably name all the major **social media analytics** tools out there. Fast forward to today, ...

Data Driven Social Media Analytics Tools | Sprout Social
https://sproutsocial.com/features/social-media-analytics ▾
Data driven **social media analytics** tools from Sprout Social let you track, measure and benchmark your top posts. Try it free.

Top 15 Social Media Analytics Tools - Free and Paid - Brandwatch ...
https://www.brandwatch.com/blog/social-media-analytics-tools/ ▾
Aug 25, 2016 - Having the right **social media analytics** tools can unearth the insights needed to take your social marketing to the next level. We run through 15 top tools.

Social Media Analytics - Hootsuite
https://hootsuite.com/products/social-media-analytics ▾
Hootsuite's **social media analytics** let you measure your social media outreach and and unlock insights from social media listening.

What is social media analytics? - Definition from WhatIs.com
searchbusinessanalytics.techtarget.com › ... › Business intelligence - business analytics ▾
This definition explains **social media analytics**, which is the practice of using data from social media sites and analyzing that data for business purposes.

The Best Social Media Management & Analytics Tools of 2017 - PCMag
https://www.pcmag.com/article2/0,2817,2491376,00.asp ▾
Sep 1, 2017 - Take an active role in shaping your company's **social media** strategy and online voice. These **social media** management and **analytics** tools can help you craft great social content and extract meaningful metrics to build an engaged audience.

20 Free Social Media Analytics Tools for Marketers - NetBase
https://www.netbase.com/blog/20-free-social-media-analytics-tools/ ▾
May 24, 2017 - May 2017 Update: We've added even more tools for 2017, check out our updated list of **social media analytics** tools below. When it comes to measuring and reporting **social media analytics**, finding the right tool for the job is incredibly important. Luckily, for most social professionals, the industry is ...

Best social media analytics tools 2017 | Gallery | Computerworld UK
https://www.computerworlduk.com › Galleries › Data Galleries ▾
Mar 13, 2017 - This **software** as a service (SaaS) social **analytics** tool offers 'social listening' and in-depth **analytics** while also providing a suite to publish and schedule tweets or posts. Its **social media analytics** insights include metrics, detailed reports, and a live data stream for numerous social channels and accounts.

Social Media Analytics Software for Businesses | Zoho Social
https://www.zoho.com/social/social-media-analytics.html ▾
A **social media analytics** platform that helps businesses identify posts that are working well, create unlimited reports, and measure the performance of their brand through meaningful graphs and statistics.

Dataset	Structure	Activities
Google Calendar	ICS	Without a lot of analysis, we can't disaggregate different types of activities in calendar data, but we can calculate the overall number of scheduled hours in a day (with special handling for overlapping and/or all-day events)
Twitter	CSV	Overall number of tweets; number of tweets featuring an interaction with another user, containing a URL, containing a hashtag, etc.
Facebook	HTML	Overall number of statuses, shared statuses, links, etc.
LinkedIn	CSV	Overall number of invitations, direction of invitations, number of new connections

- **Facebook data** was missing some interesting features.
- **Calendar data** can only be used to aggregate over a time period vs being able to identify specific events.

Install and test this tool

- Clone the github repo: https://github.com/UWSEDS-aut17/groupby.git
- From the command line, navigate to the repo and run these commands:
    - `python setup.py install`
    - `pip install -r requirements.txt`
    - `python setup.py test`

Obtain your data

To use this tool, you must download and unzip **at least one** of these datasets from a personal social media account (note that there can be a delay of a day or so, depending on the platform):

- Facebook - Official instructions
- Twitter - Official instructions
- LinkedIn - Official instructions

Calendar data can be analyzed **in addition** to one or more social media datasets:

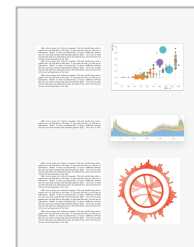- Google Calendar - Official instructions

Use the tool (command line)

Option	Argument	Example Argument
-T	Path to Twitter data directory	~/Downloads/Twitter
-F	Path to Facebook data directory	../backups/Facebook12-20-2014
-L	Path to LinkedIn data directory	data
-C	Path to Calendar data file	~/Documents/mycal.ics

The simplest use case is to analyze a **single social media dataset**:

```
python main.py -T path/Twitter_directory
```
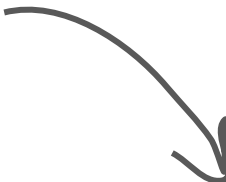


```
chris@ubuntu: ~
chris@ubuntu:~$ PS1="[\d \t] \u@\h\n\w\$ "
[Tue May 16 12:02:39] chris@ubuntu
~$
```

Option	Argument	Example Argument
-T, --twitter	Path to Twitter data directory	~/Downloads/Twitter
-F, --facebook	Path to Facebook data directory	../backups/Facebook12-20-2014
-L, --linkedin	Path to LinkedIn data directory	data
-C, --calendar	Path to Google Calendar data file	~/Documents/mycal.ics
-O, --output	Path to desired report output location	~

```
groupby -T path/Twitter_directory -F path/Facebook_directory -O ~/Desktop
```
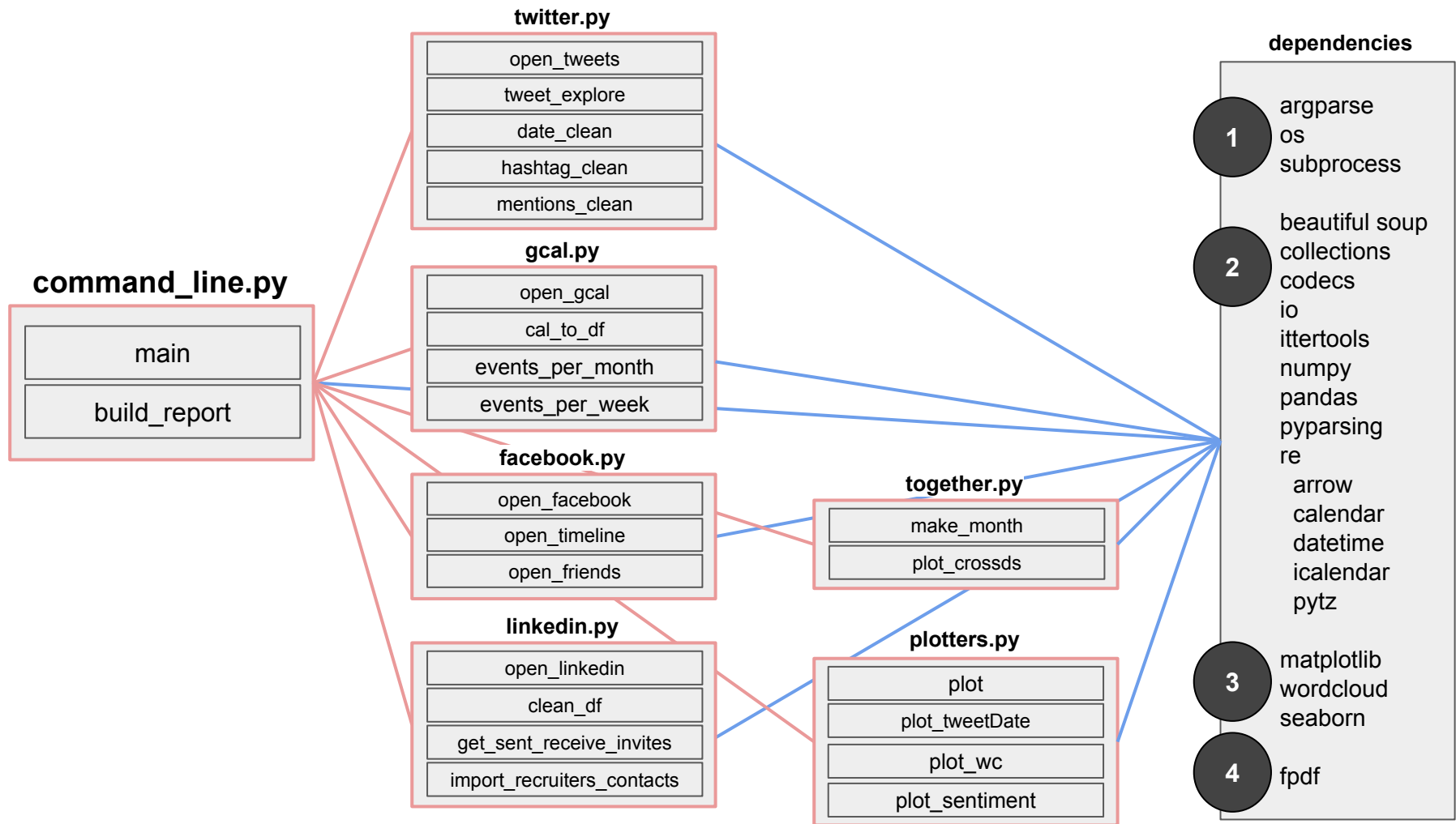
groupby Home (master)
| .gitignore
| LICENSE
| README.md
| requirements.txt
| **setup.py**
|
|----- doc
|
|----- examples
|
|----- groupby
| |----- tests
| |----- data

|----- **doc**
| | components.md
| | data.md
| | specs.md
|
|----- **examples**
| | Facebook_functions.ipynb
| | LinkedIn_analysis.html
| | LinkedIn_analysis.ipynb
| | Twitter Analysis.ipynb
| | gcal.ipynb

|----- **groupby**
| | __init__.py
| | facebook.py
| | gcal.py
| | linkedin.py
| | main.py
| | plotters.py
| | twitter.py
| |
| |----- **tests**
| | | __init__.py
| | | README.md
| | | test_main.py
| |
| |----- **data**
| | | README.md
| | | example.ics
| | | tweets.csv

DEMO

Future Work

- Create a web based UI
- API documentation
- Examples for users

Lessons Learnt

- Data Wrangling takes time
- Github is great, but also needed in-person collaboration