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Exercise 2

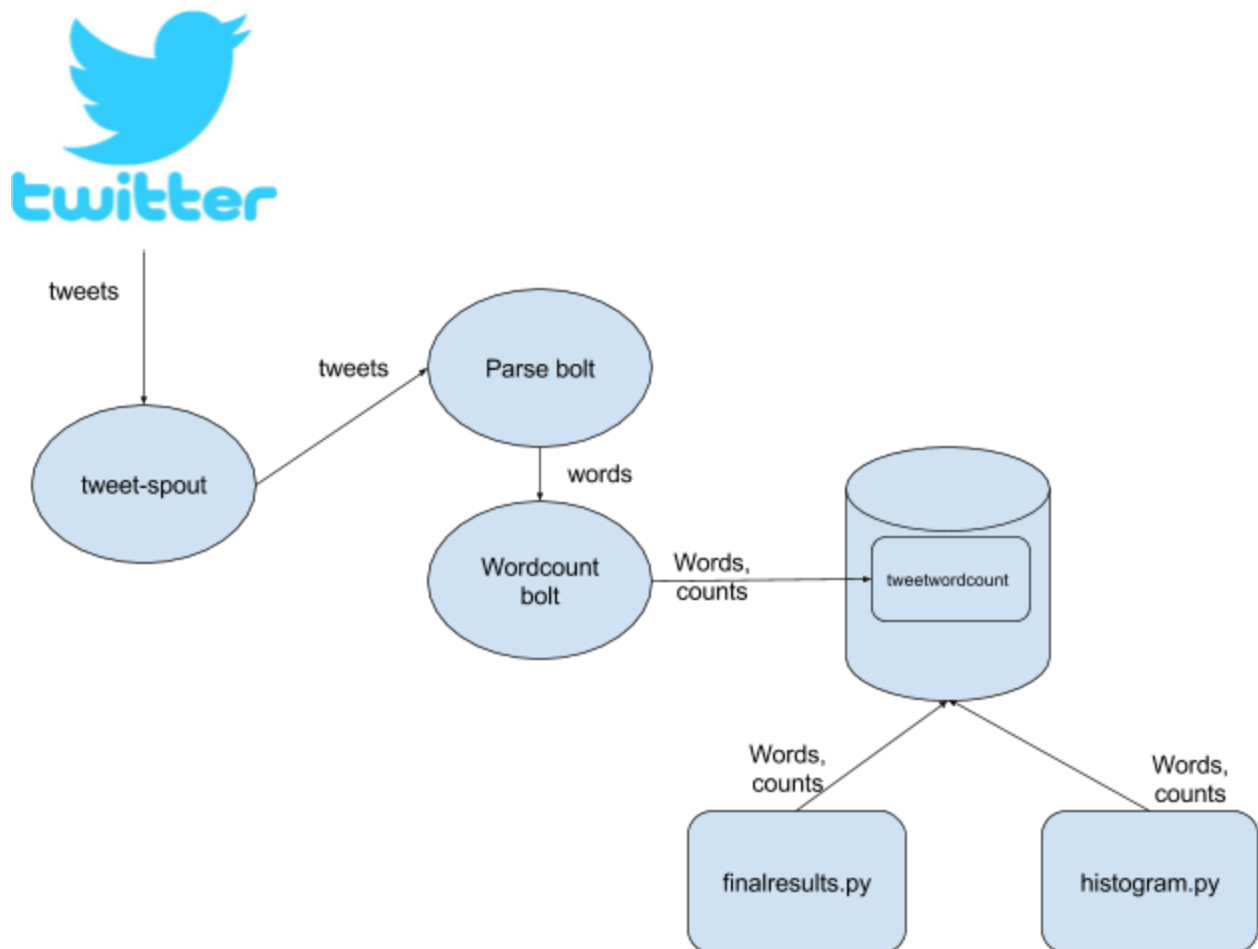
8/12/17

## Tweet Word Count

This application streams tweets from twitter for a short amount of time, then counts then splits the words in the tweets so they can be counted. The counts of the words will be stored in a postgres database where it can be used for various analysis.

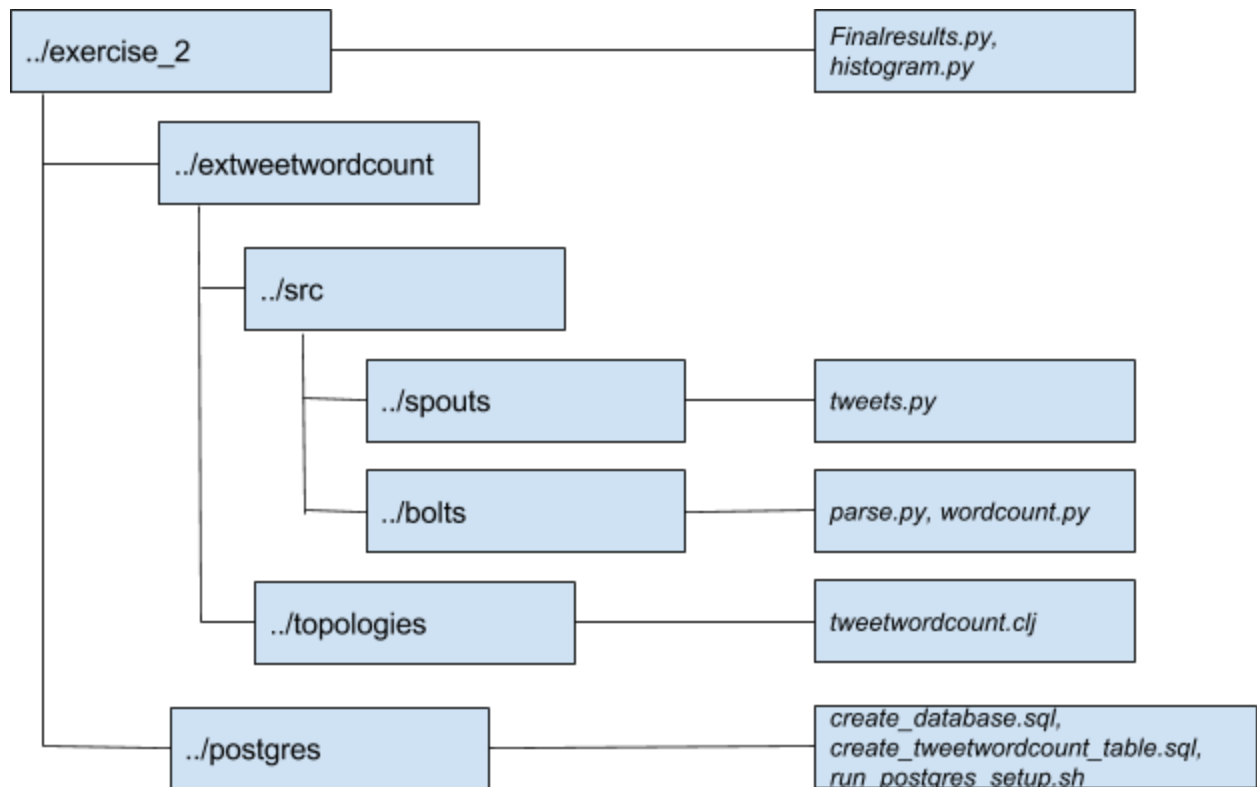
### Architecture

The following shows the architecture of our app.



## Directory and file structure

The following shows the location of the files.



## Directions to Run App

### 1. Copy Files and Directories

The configuration I used during my run assumed all the files were under the directory `./exercise_2`, however you can use any top directory.

The following files should be copied using the layout above. In the rest of the document, will refer to the `./exercise_2` (or whatever its replacement is) as `$EX2_TOP_DIR`.

## 2. Set up Database

To set up the database, log in as root (to allow changing to postgres, w205 user) and run the "run\_postgres\_setup.sh" file passing in the full path to the postgres directory.

```
# cd $EX2_TOP_DIR/postgres
# ./run_postgres_setup.sh $EX2_TOP_DIR
```

This step assumes postgres is up.

## 3. Run Storm

Before running storm, please enter the twitter credentials in \$EX2\_TOP\_DIR/exttweetwordcount/src/spouts/tweets.py.

```
$ cd $EX2_TOP_DIR/exttweetwordcount/
$ streamparse run -t 60
```

## 4. Run scripts

After Storm has populated the tweetwordcount table, the data can now be used.

```
$ cd $EX2_TOP_DIR
```

To get number of times a word appears:

```
$ python finalresults.py <word>
```

To get all the words and their counts:

```
$ python finalresults.py
```

To get all words within a count range:

```
$ python histogram.py <low_value> <high_value>
```