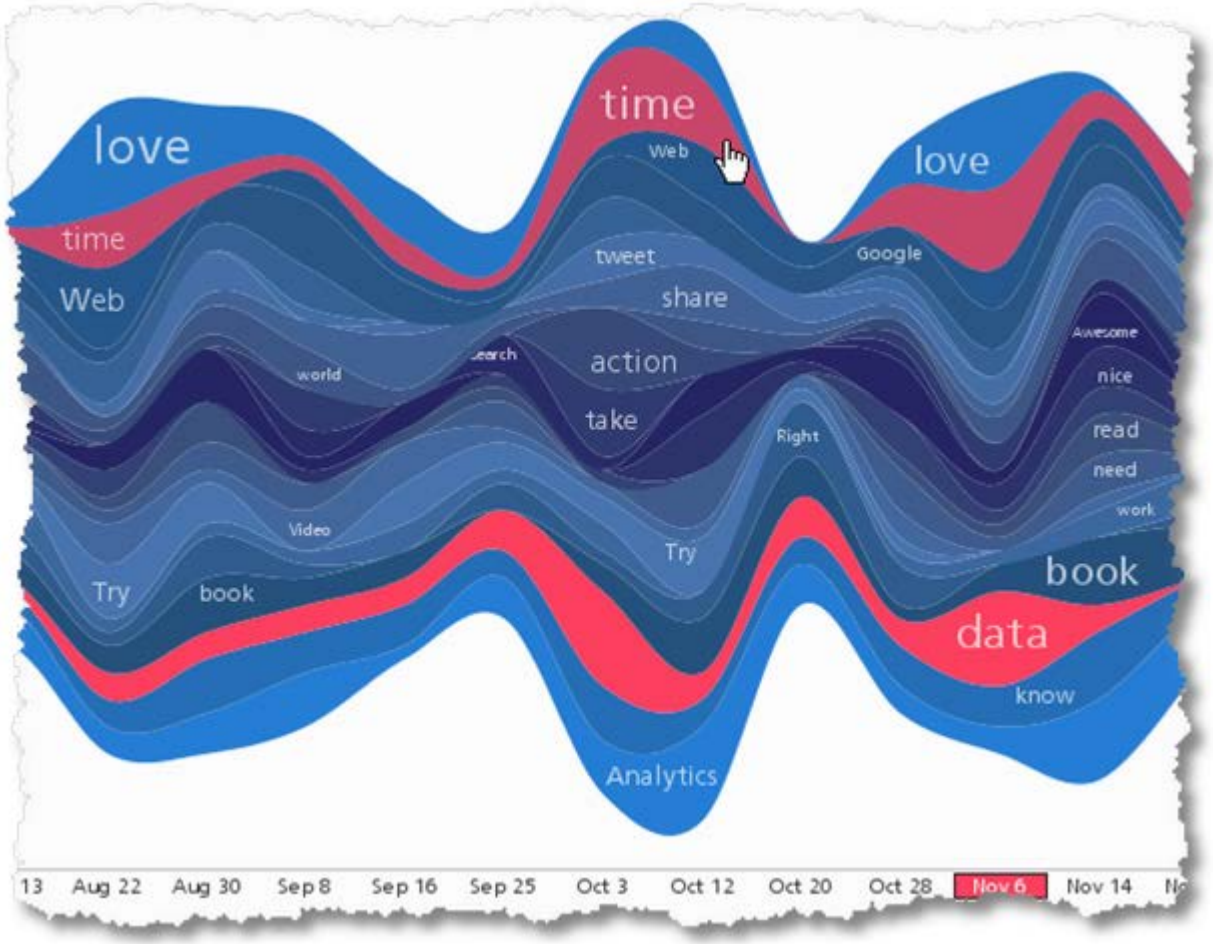
W205 Spring 2016 – Exercise #2

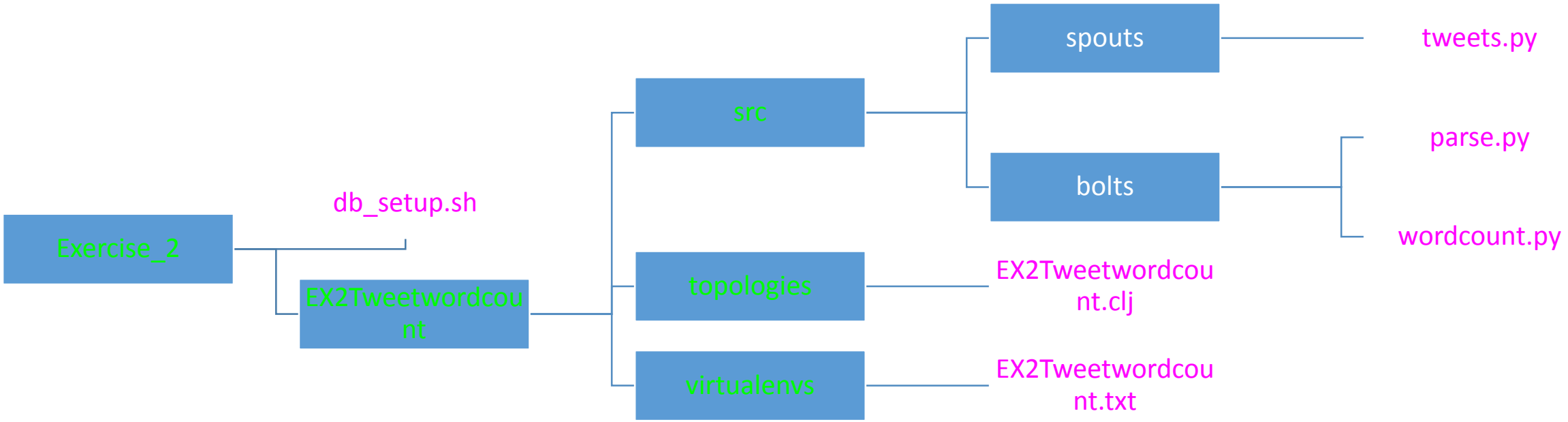
Beth Partridge

Application Idea

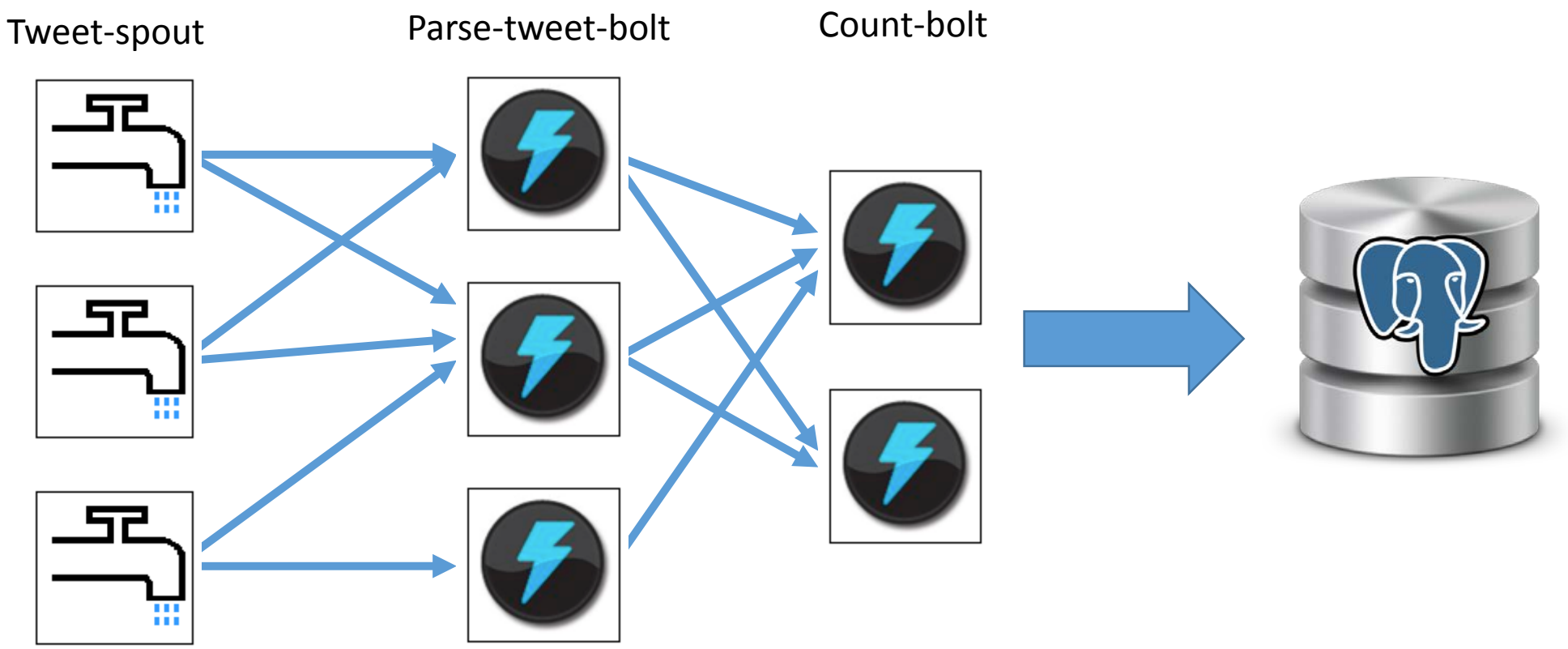
- Capture and analyze live Twitter data for a deeper understanding of social trends and demands using Apache Storm
- Use Tweepy library to read the live Twitter stream
- Parse the stream down to individual ascii words
- Store and update cumulative word counts in a Postgres database



Directory & File Structure



Architecture Block Diagram



Assumptions & Dependencies

- Assumptions
  - Python 2.7
  - PostgreSQL 8.4.20
- Required packages:
  - Tweepy
  - Psycopg2
  - Streamparse
  - Matplotlib
  - Re
- Other
  - Twitter application and credentials

Instructions to Run Application

1. Launch AWS EC2 instance using UCB W205 Spring AMI
2. Attach a volume already prepared with assumptions listed above
3. Clone Exercise_2 repository from Github: git clone <repository URL>
4. Change to Exercise_2 directory: cd Exercise_2
5. Make the db_setup script executable: chmod a+x db_setup.sh
6. Execute the setup script: bash db_setup.sh
7. Change to the EX2Tweetwordcount directory: cd EX2Tweetwordcount
8. Run the application: sparse run
9. When you see a word count reach 10 stop the application with ^C
10. Run finalresults.py with no argument: python finalresults.py
11. Run finalresults.py with a common word argument: python finalresults.py the
12. Run histogram.py to see all the words with counts between 6-10: python histogram.py 6,10