

Team Members:

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Pulse - Project Milestone #3

1. Demo Successes/Completed Features

- a. Ability to search tweets by keywords and analyze the results to calculate overall sentiment scores. This allows us to search for tweets about “Thing X” and see how many of them are neutral-toned, positive-toned or negative-toned.
- b. Ability to pull metadata for a given YouTube video. This allows us to see important statistics about a video such as likes/dislikes, views, publish date, etc. which are all useful metrics in discovering trends.
- c. Ability to login to a remote VPN that provides access into our in-progress development environment currently consisting of a PfSense firewall, a FreeIPA identity management server, and a Foreman deployment server. Able to demonstrate centralized authentication and authorization provided by FreeIPA.

2. Issues Faced During Development

- a. We made the decision early on to create our own private cloud hosted in the home of one of our team members. This choice was made because at the time we believed our app would require more resources than a free-trial to Heroku, AWS, GCP, etc. could provide. Plus, once our private cloud is up we'll get a bit more flexibility when it comes to our development lifecycle.
- b. We had originally looked at using an open-source tool called [Twint](#) as the base of our application. Twint provides Twitter search functionality and a website/frontend search platform out of the box, so we wanted to extend it and contribute to it by adding more social media platforms. We quickly learned however that the project is just way more trouble than it's worth, as it can be a pain to get up and running correctly. This is why we made the transition to [tweepy](#).

3. Suggestions Offered by TA

- a. Currently we are in the works of achieving full support for the APIs of two social media platforms: with Twitter we have the capability to search and analyze Tweets and with YouTube we have the capability to pull metadata videos. We made plans to have our app support Reddit and Instagram as well, however our TA explained that we might want to think about just focusing on Twitter and YouTube first. She said that we might find more success focusing on two platforms first and getting those fully supported before divvying up our time into more platforms.

- b. As a team we've been going back and forth a bit in regards to whether or not we actually want to store data scraped from social media. Our TA explained that some APIs have a streaming functionality that will send tweets live to an ingest point for collection and analysis, but she also explained to us that this may not be of good use for our project. Since the intended use of our search platform is to provide the capability to understand trends in any subject area at the present moment, we would be better off pulling data from APIs on a per-user-search basis so we can tailor our results more effectively.