Twitter Detective

Anna Hazard, Dani Litovsky Alcala, Devin Munger, Manuel Aragones Mora

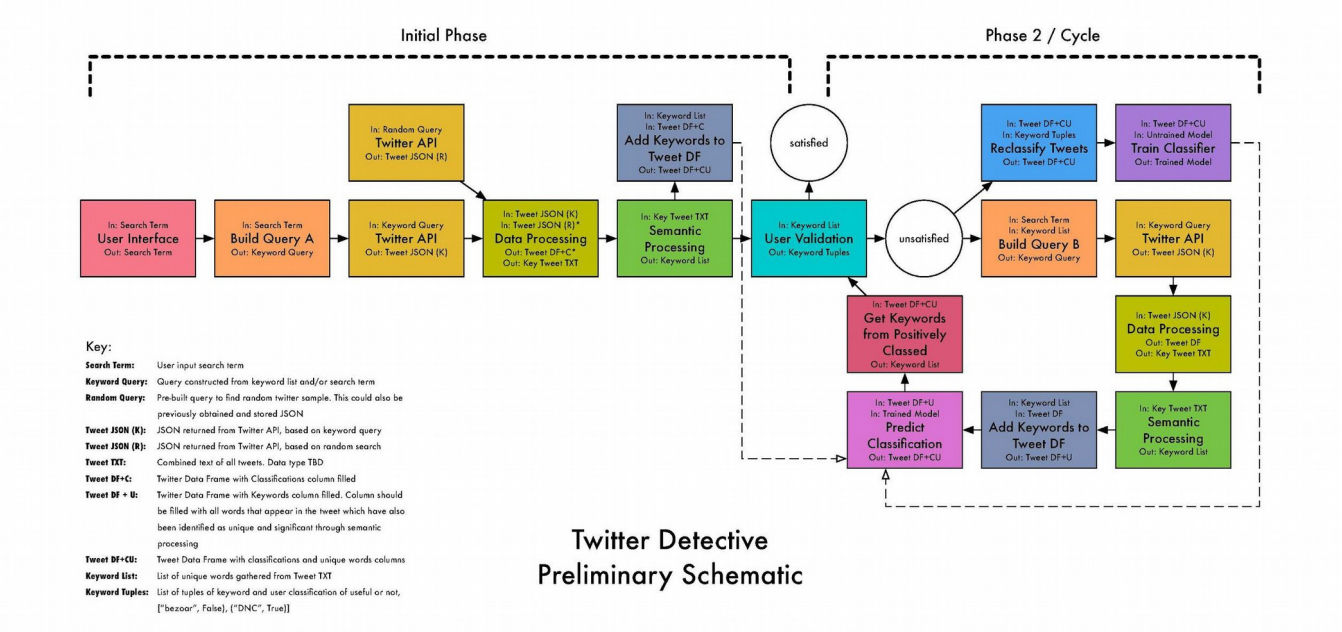
Scope Changes

Since the project presentation, we switched the scope of the project from sentiment analysis of twitter data to honing on a command-line program that suggests twitter search words based on user input. The goal of the project is to use machine learning tools to offer new search terms that could bring more insight or new information to the topic the user is interested in but did not previously consider.

Progress

Since the check-in meeting, we have created the command-line interface that takes user input and all functions for the program. The first user input is used to query the twitter API and get random sample tweets and tweets with the relevant key term. We transform the tweets into a dataframe that machine learning algorithms, including KNN, logistic regression, Naive Bayes, and Support Vector Machines, are able to process and classify as a word that would or would not be of interest to the program user.

A schematic best describes the flow of our program.



Twitter Detective
Preliminary Schematic

At this point, most of the program code is complete. We are able to query the Twitter API, get and save tweets, and run machine learning models. Some changes to the program design and tweet processing functionality, as well as integration, and debugging, are forthcoming.

For the project final presentation, we hope to describe our approach, the program's use in public policy, and provide examples from using the tool.