MIS0855: Data Science
In-Class Exercise: Manually Determining the Sentiment of Textual Data

Objective: Differentiate between positive and negative sentiment in text

Learning Outcomes:
- Perform a manual sentiment analysis of a Twitter stream
- Develop rules for classifying a message as positive or negative
- Explain the problems and issues with accurately describing sentiment within text

Part 1: Group (15 minutes)
1) In groups of two, visit two Twitter feeds for well-known brands. You can choose any brand you want for this, but if you need some ideas:
   - CocaCola @CocaCola http://twitter.com/cocacola
   - McDonalds @McDonalds http://twitter.com/mcdonalds
   - Honda Motors @Honda http://twitter.com/honda
   - Starbucks @Starbucks http://twitter.com/starbucks
   - Nike @Nike http://twitter.com/nike
   - H&M @hm http://twitter.com/hm

2) Within feed, click on a few tweets and read the replies.

3) Find three examples of positive tweets, three examples of negative tweets, and three examples of neutral tweets (neither positive nor negative). Write them down in three lists.

4) Make a note of why you classified them as positive, negative, or neutral.

Part 2: Larger Group (5 minutes)
1) Find another group to form a group of four.

2) Share your lists of positive and negative tweets. See if you agree with each other’s choices.

3) Come up with rules for determining whether a tweet is positive or negative. For example:
   a. Are there certain words which increase your certainty of how to classify the tweet?
   b. Are there certain tweets that sound positive but really are negative?
   c. How do you detect sarcasm?
   d. How would you explain to someone how to classify tweets?
Part 3: Class Discussion (20 minutes)

We’ll compare notes. Specifically, we will discuss:

- What are some rules for determining positive versus negative sentiment?
- Were some tweets difficult to categorize? Why?
- In what ways would this be a good method of understanding how people felt about your brand? In what ways could it give you bad information?