**Literature Review**

Broad overview of sentiment analysis/opinion mining(Cambria, Schuller et al. 2013)

* Opinion mining includes polarity classification (of a single issue – which can have a degree to it) and agreement detection (should pair of text items receive same labels); can we detect and exclude “flames” – overly heated or antagonistic language.
* Extract feature vectors for term frequency and presence, use token position; adjectives heavily used for sentiment classification
* Unsupervised learning – sentiment lexicon a term’s prior polarity/subjectivity helps id contextual polarity or subjectivity
* Have to develop pos/neg specific to movies and books

What’s already been done w/ movies + books in the past

* Supervised learning (using numeric rating) with overall positive/negative classification of movie reviews using Naïve Bayes classifier (w/ 89% accuracy), AdaBoost algorithm, fuzzy lattice reasoning(Satheesh Kumar and Vijayan 2013)
* Book Reviews – mined as one of many features for a book recommendation engines and extracts additional features from the reviews (Sohail, Siddiqui et al. 2016). The features are multiple occurrences, Helpful content in the book, comprehensive material; availability in the market, Irrelevant content in the book, cost and user’s rating respectively.
* Using feature tags from reviews to create clusters of similar books – used TF-IDF to get tags(Lin, Shiaofen Fang et al. 2013)

Cambria, E., et al. (2013). "New Avenues in Opinion Mining and Sentiment Analysis." Intelligent Systems, IEEE **28**(2): 15-21.

The Web holds valuable, vast, and unstructured information about public opinion. Here, the history, current use, and future of opinion mining and sentiment analysis are discussed, along with relevant techniques and tools.

Lin, E., et al. (2013). Mining Online Book Reviews for Sentimental Clustering**:** 179-184.

The classification of consumable media by mining relevant text for their identifying features is a subjective process. Previous attempts to perform this type of feature mining have generally been limited in scope due to having limited access to user data. Many of these studies used human domain knowledge to evaluate the accuracy of features extracted using these methods. In this paper, we mine book review text to identify nontrivial features of a set of similar books. We make comparisons between books by looking for books that share characteristics, ultimately performing clustering on the books in our data set. We use the same mining process to identify a corresponding set of characteristics in users. Finally, we evaluate the quality of our methods by examining the correlation between our similarity metric, and user ratings.

Satheesh Kumar, R. and S. Vijayan (2013). "Mining movie reviews - An evaluation." Journal of Theoretical and Applied Information Technology **56**(2): 290-295.

Sohail, S. S., et al. (2016). "Feature extraction and analysis of online reviews for the recommendation of books using opinion mining technique." Perspectives in Science **8**: 754-756.