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Data Science & Analytics Project Part 1 – Project Design

## **Project Goal:**

The project goal is to create a statistical model of English sarcasm that can be used to determine if an English text is sarcastic or not automatically

## **Project Summary:**

What we hope to accomplish by the end of the project is to have a probable statistical model of English sarcasm that can be connected to a variety of different software implementations as well as an implementation specific to our project. We plan on using the nltk library in Python for analysis and Tableau for visualization as to accomplish this. The importance of this project is, regardless of the utility or lack thereof the ability to analyze the sentiment of a text in some online forum, will be widely applicable in the age of information. We hope that by producing a statistical model of English sarcasm that can be used to determine if an English text is sarcastic or not, this statistical model can be used and applied to various other forms of text analysis online. How we plan to execute this project is to divide the data set amongst each group member as well as collectively determine metrics so that each group member will have a set of metrics to calculate and graph.

## Tasks:

The spreadsheet for the tasks can be found here:

https://docs.google.com/spreadsheets/d/15pfClw353CceNJSaDTyWN4Gks7OzTciDINqbGHlZ M6g/edit?usp=sharing

## **Team Roles:**

So far what we have planned out in terms of team roles is Michael and Steve are currently breaking down the large data file that contains the sarcastic phrases so that we can perform analysis on the data set. Once we organize the data set in a way that is usable for our desired analysis, we all collectively will determine what specific analysis we would like to do and perform the analysis. Currently, while Michael and Steve are working on that, the rest are figuring out how to integrate the data set with tableau to produce visualizations for our analysis. Mirko and Gennadii will take responsibility for visualization with tableau. Jennie is the coordinator of the group and is also taking care of compiling the information from the team to write up the reports and make the presentations, but while she is not doing reports and making the presentations, she is participating in the other roles as well. Overall, for the team roles, we thought it was best for a few people to work on doing different parts of the project to avoid making the project harder than it needs to be. The roles can change at any moment, but this is what we currently have discussed in terms of roles.