Project Proposal

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Our team will be studying the suggested quantitative fact checking project through the data on GovTrack.us. We would hope to provide an application that would allow users to explore and visualize the rich dataset available. After our discussion with Professor Yang, we have decided that we will join his project team developing similar capabilities on the same data set. In preparation for our work with his team, we have considered a variety of features that we believe would be beneficial.

First is the ability to view which representatives and senators vote most similarly to each other. In its most basic form, this would take the form of a ranked list of votes on all bills in the last several congresses, where the user can specify a start date. However, this also allows for several expansions. One would be a visualization of these data, allowing for a more engaging comparison of voting similarity. Another would be to filter votes by “controversial” bills, as defined by the difference in the fraction of Republicans and Democrats who voted for each bill.

Second, we would allow users to select any two representatives in congress who they wish to compare to compare similarity in voting records, both in the most recent Congress and over time. This also allows for extensions, including the ability to compare several representatives simultaneously (though likely not more than 5). Also, when selecting two representatives (call them A and B) we could also return a list, or just the number, of representatives who are more similar to A than A is to B for a more qualitative comparison of their similarity.

For both types of comparison above, we also propose the ability to organize bills by category, such as health care and gun control to compare similarity on specific issues. The automated categorization of these bills may be difficult, but this is a feature for which we would like to figure out at least some implementation.

One final feature we have considered is summary statistics and visualizations for Congress over time. This would allow for analysis of overarching questions concerning political polarization and prediction of future voting trends.

This project is interesting because it allows for quantitative study of political issues affecting the entire country. These issues are often discussed in qualitative ways and through hypotheticals, but this will allow for concrete analysis and exciting visualizations of the reality of these issues.

We will know more about the building of the application on Friday, when we meet with Professor Yang’s team. We will of course be following their lead on system architecture, platform, and other application-level issues.

Our discussion with Professor Yang occurred over email on October 14, 2015, which is when we agreed to join his research team studying the GovTrack data set.