Team Dragon: Senate Project

Mike, Komal and Greg

Goals:

- Determine which Senators drive legislation, cooperate best with their own party and the other and lead effective voting blocs
- Analyze the topics and content of bills that are introduced, voted on, pass and become law to determine the likelihood of future legislation to become law
- Understand the impact of campaign donations on legislative actions and effectiveness
- May expand to the House of Representatives

Data:

- GovTrack API: Extensive documentation on individual bills, legislators, co-sponsorships, and roll call votes
  - Free, without an access key
  - Consistent and updated daily
- Sunlight Foundation API: Contains information on all documented campaign donations from the FEC
  - Free, access key available
  - Updated daily

Technologies

- Django: Mike has been completing the tutorial online and will be attending the Django Workshop in February
  - Will use to connect data and a frontend webapp an online webapp
- Javascript/D3: Greg has experience with Javascript
  - Will use to display data interactively (can mouse over for more information etc.)
- Network Centrality/Graphs: Greg and Komal have studied network interaction
  - Can explain which legislators are leaders and the relationships between individuals
  - The Python package NetworkX can create graph object, which can be transferred to D3 for visual display
- Chron: Will use to continually update database over time with new data
- Plan to explore other algorithms once we have more experience with data

Timeline:

- Done: Have already begun writing functions to get data from GovTrack
  - This takes a while as our current work must makes calls for each Senator, cosponsorship and bill in the current Senate term (5000+ API calls)
- Now: Will need to store data offline in SQLite3 Database for quicker access and analysis
  - This will guide our parameters (How many years back do we go? Can we add the House?)
- Now: Begin understanding Django
- Next Week: Begin exploring network centrality algorithms in order to analyze data
- 2 Weeks: Begin writing Django interface and visualization options with D3
- 3 Weeks: Tie everything together, explore free hosting options
  - These two tasks will likely be the bulk of our work as we have the least knowledge here

Questions

- What suggestions do you have for us in general?
- Are their other technologies that may be more useful to us?
- What difficulties do you imagine us having?