Group name: Totally Terrific Tom

Members: Tom Haumersen 10397946

This web app will allow you to upload a text document and then do some static analysis of that text for basic criteria like average sentence length, word length, reading level, average word length and reading level as the text goes on, top 10(maybe 100) most common words. I would like to be able to upload the full text for *Flowers For Algeron* ([spoilers](https://en.wikipedia.org/wiki/Flowers_for_Algernon#Short_story)) and be able to graph his “intelligence” over the story. Other fun ideas would be to graphically compare speeches from different presidents to see if there is any patterns between parties or obvious. Users would be able to select a bunch of different texts and see them all graphed on the same axes.

Inclass technologies:

1. TypeScript: I want to have the whole project statically typed, or as close to it as possible. I have wanted to try this for a project for a long time, and I think it will make working with the same data objects in the front and backed end much easier.
2. Redis: I enjoyed working on caching the one homework assignment. It is really cool seeing the performance increase due to caching, even if disk speed was simulated.
3. Bootstrap: I am really bad at trying to be creative styling wise. Bootstrap gives me a nice set of rules to follow which tends to inspire me more than just raw HTML and CSS

Express will also be the web server and mongodb to hold all the data.

New Technologies:

1. [Text-statistics](https://www.npmjs.com/package/text-statistics)
2. [NVD3.js](http://nvd3.org/) or just plain [D3.js](https://d3js.org/): I have used D3 at a past job. While there was a huge amount of strength to the library, trying to doing one new simple chart was a grueling task. I understood the goal of the library but I always ended up not straying too far from online examples. NVD3 seems it’s a lot easier to start with simple charts that work well off the bat. If this doesn’t prove to be the case I’ll just go back to using D3