Exercise 3: Visualize Textual and Qualitative Data
10/21/2024

| Attempt 1 ⌄ |

○ In Progress
NEXT UP: Submit Assignment

⊡ Add Comment

2 Attempts Allowed
12/2/2024

⌄ **Details**

Exercise 3: Visualize Textual and Qualitative Data

What are you building?

Create a visualization using the provided State of the Union text corpus. Your visualization should translate qualitative features of the corpus into design elements.

Consider some of the elements of text based visualizations we've discussed as a group in class. What do you want to reveal, challenge, or investigate?

You are free to choose from any tools within your repertoire to approach your project.

As a starting point you might consider making:

- A visualization that counts the number of occurrences of types of words across speeches
- A visualization that maps relationships and connections between words
- A visualization that maps similarities, overlaps, and differences between speeches

Learning Objectives

Through this assignment, you will gain experience in

- Translating qualitative features into discrete values (e.g. translating a category into a shape)
- Selecting an appropriate visualization method for your concept
- Using d3.js to compose your visualization

Submitting Assignment

Your visualization will be submitted online using Canvas. Your visualization should be exported as a PNG file.

- Image (.png; 1920 x 1080 pixels; 300 DPI; sRGB or Adobe 1998) of your visualization
- Archive file (.zip or .tar.gz) containing any supporting materials
  - Web files (.html, .css, .js, .vue)
  - Image assets (.png, .jpg, .gif)
  - Data (.csv, .json)

Grading

This assignment represents 10% of your total grade.

Criteria

- Material includes appropriate citations and sources.
- Please refer to rubric for additional criteria.

University Grading Scale

- A Work of exceptional quality
- A- Work of high quality
- B+ Very good work
- B Good work; satisfies course requirements
- *Satisfactory completion of a course is considered to be a grade of B or higher.*
- B- Below-average work
- C+ Less than adequate work
- C Well below average work
- C- Poor work; lowest possible passing grade
- F Failure
- GM Grade missing for an individual

Additional Details

References

- https://www.kaggle.com/rtatman/state-of-the-union-corpus-1989-2017
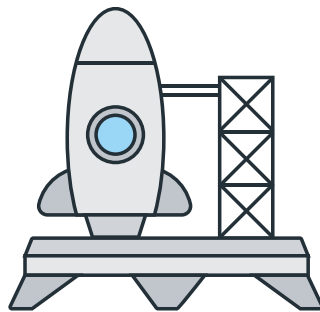- Natural Language Processing Libraries

- "What is Natural Language Processing": **https://towardsdatascience.com/your-guide-to-natural-language-processing-nlp-48ea2511f6e1 (https://towardsdatascience.com/your-guide-to-natural-language-processing-nlp-48ea2511f6e1)**
- RiTa.js: **https://rednoise.org/rita/ (https://rednoise.org/rita/)**
- compromise: **http://compromise.cool (http://compromise.cool/)**
- Sentiment: **https://www.npmjs.com/package/sentiment** ⤵ **(https://www.npmjs.com/package/sentiment)**

Downloads

- Data Set: **sotu.zip (https://canvas.newschool.edu/courses/1793728/files/137360609?wrap=1)** ↓ **(https://canvas.newschool.edu/courses/1793728/files/137360609/download?download_frd=1)**

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