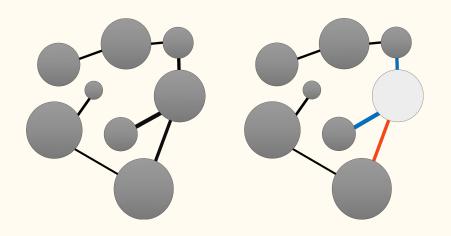
ShakesPeer - Peer Review 1

Frances, Kevin, Mint November 19, 2019

What's ShakesPeer? (Background)

A tool for visualizing relationships between Shakespearean characters to provide better understanding of the plot. More specifically, it reveals useful and nuanced insights about characters' relationship development over time.



Main view

10 Sentiment Valence 5 -15 -20

Relationship view

Status

Done

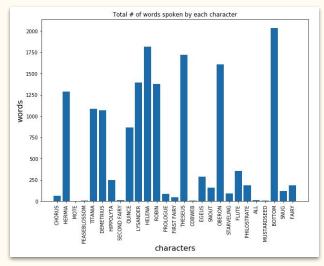
- Data collection and cleaning
- Setting up code framework and GitHub repo
- Research on and implement character-to-character sentiment analysis
- Calculate character's speech distribution/scene

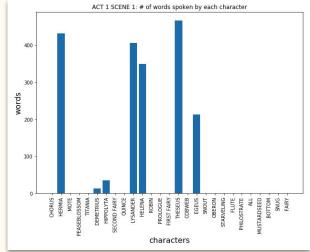
• To-Do

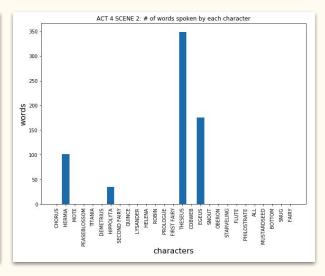
- Implement main view
- Implement relationship view
- Implement interactions
- o Paper write-up

Data Collection & Cleaning

- Raw text data obtained from **Project Gutenberg**
- Extracted list of characters (Python)
 - # of words spoken overall, per scene







Character-to-character Sentiment Analysis

- Algorithm based on Nalisnick and Baird's paper.
 - Use AFINN lexicon to determine sentiment valence of a chunk of text.
 - Assume that the sentiment of a dialogue is directed to the character that speaks immediately before the current speaker.
- The sentiment valence in our case is accumulated by scenes.
- Finished implementing this in Python.
- If time permits,
 - we may do in-depth investigation of the result and see if there's a way to improve our assumption to obtain higher accuracy.
 - we may also investigate if the sentiment calculation should be more fine-grained (at a more detailed level than accumulating by scenes.)

Sentiment Analysis Result

1	Character1	Character2 A1/S1	- A1/S2	- A2/S1	- A2/S2	- A3/S1	- A3/S2	- A4/S1	- A4/S2	-
2	THESEUS	HIPPOLYTA	9	0	0	0	0	0	7	0
3	THESEUS	EGEUS	17	0	0	0	0	0	0	0
4	THESEUS	HERMIA	-1	0	0	0	0	0	0	0
5	THESEUS	DEMETRIUS	0	0	0	0	0	0	6	0
6	THESEUS	LYSANDER	0	0	0	0	0	0	-12	0
7	THESEUS	TITANIA	0	0	0	0	0	0	7	0
8	HIPPOLYTA	THESEUS	5	0	0	0	0	0	-1	0
9	EGEUS	THESEUS	19	0	0	0	0	0	0	0
10	EGEUS	LYSANDER	19	0	0	0	0	0	2	0
11	HERMIA	DEMETRIUS	0	0	0	0	0	-22	0	0
12	HERMIA	LYSANDER	21	0	0	23	0	16	0	0
13	HERMIA	HELENA	7	0	0	0	0	-1	0	0
14	HERMIA	ROBIN	0	0	0	0	0	-7	0	0
15	DEMETRIUS	THESEUS	3	0	0	0	0	0	2	0
16	DEMETRIUS	EGEUS	0	0	0	0	0	0	18	0
17	DEMETRIUS	HERMIA	0	0	0	0	0	-2	0	0
18	DEMETRIUS	LYSANDER	0	0	0	0	0	0	2	0
19	DEMETRIUS	HELENA	0	0	8	-1	0	6	1	0
20	DEMETRIUS	ROBIN	0	0	0	0	0	-1	0	0
21	DEMETRIUS	OBERON	0	0	4	0	0	0	0	0
22	LYSANDER	THESEUS	0	0	0	0	0	0	-2	0
23	LYSANDER	EGEUS	5	0	0	0	0	0	0	0
24	LYSANDER	HERMIA	15	0	0	10	0	-6	0	0
25	LYSANDER	DEMETRIUS	3	0	0	0	0	-18	0	0
26	LYSANDER	HELENA	0	0	0	1	0	25	0	0
27	LYSANDER	ROBIN	0	0	0	0	0	-4	0	0