Gender Imbalance in a Movies Graph

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Introduction

In 1983, American cartoonist Alison Bechdel released her comic strip “Dykes to Watch Out For”, which chronicled the lives, loves, and politics of a diverse group of characters (most being lesbians) living in a city in the United States. In “The Rule ", a DTWOF strip released in 1985, two female characters heading to a movie theater discuss their criteria for which they decide whether or not they would watch that movie. They detail that the movie must satisfy the following requirements (1) :

- The movie has at least two women characters,
- who talk to each other,
- about something other than a man.

Thus, the concept of the *Bechdel* (or *Bechdel-Wallace*) *Test*, which provides a criteria/measure of the representation of women in film and other fiction, was introduced into the mainstream (2).

To this day, the representation (or lack thereof) for women in both character, acting, and production roles has been a very important discussion. While progress has been made towards greater representation of women in media and movies, there is still a long way to go. It is important for the industry to continue to prioritize diversity and inclusivity, both in front of and behind the camera, in order to create more accurate and inclusive portrayals of women on screen.

In this project, we attempted to apply the Bechdel tests to movies and see which movies do or do not pass this test. Furthermore, this project allowed us to apply our knowledge of data structures taught to us throughout this semester in 230 to sort through movies and actors using graphs.

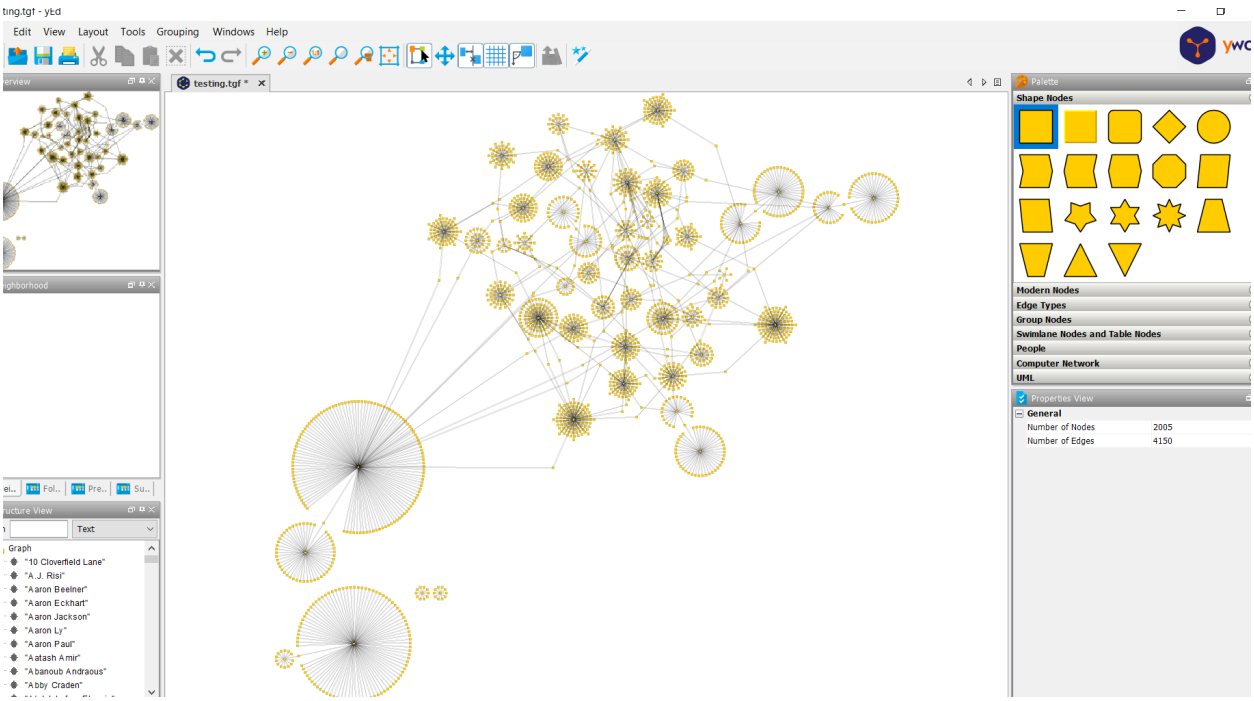
Method

Prior to working on the HollywoodApp class, we decided to create two separate classes. One creates movie objects and the other is a collection that holds those movies. Doing so allowed us to read in data files and access the information associated with each movie that would be necessary for HollywoodApp. Within the MovieCollection class, we decided to read in the file and call the constructor of the Movie class, creating each movie as its own object. With this, we were able to create methods that returned vectors of what we desired: all movie titles, all actors, all movies that one actor played in, and all actors that played in this movie. We knew that being able to manipulate this information would be vital in the creation of the graph within HollywoodApp.

Designing the HollywoodApp class became more manageable after Movie and MovieCollection was created. We knew that the outputs obtained from the methods within those classes would allow us to appropriately add our vertices and edges. Since we MovieCollection has the methods that gets all the movie titles and actor

s, we looped through these vectors and added each as a vertex. As for the edges, we called the methods that produced all the actors in a particular movie, displaying the “played in” relationship. Then, we were able to create our graph based on the inputted file’s information.

With HollywoodApp, we created the graph for the file “nextBechdel_castGender.txt.” Calling this file resulted in a delay of a few seconds, but then the .tgf file was created. Once we opened the graph in yEd, there were a multitude of connections. The relationships between actors and movies are complex; it was really interesting to see this visually. We wonder how these graphs can depict other types of relationships and what that can mean for analysis or observations of data.



Collaboration

Before coding, the three of us met to first discuss broad program design ideas. We each suggested ideas and came to a conclusion based on what we decided would theoretically be the most coherent and understandable course of action. Then, when it came time to implement details of the code including classes, methods, and overall design details, we each separately implemented the design that we had discussed using our own methods, but would then come together to discuss what we had each come up with, consolidating the best and most efficient answer as our final design.

We met up frequently and on a regular basis to complete all the tasks and major design decisions together as a team, as well as attending any office hours or meetings together as a team. We emphasized the importance of collaborating with each other, and thus did not make any huge structural or design decisions individually. Rather than split up the tasks, we worked through each problem and task together and made a conscious effort to all be together when working on the project, even if we were coding on our own computers. This way, each person could implement what they thought would be the best methods, but we could also collaborate and ask each other questions to come to a singular design.

Citations

1. Martindale, Kathleen (1997). *Un/Popular Culture: Lesbian Writing After the Sex Wars*. Albany, NY: State Univ. of New York Press. p. 69. ISBN 978-0791432891.
2. *What Is the Bechdel Test? Movies That Pass & Fail | Backstage*. https://www.backstage.com/magazine/article/what-is-the-bechdel-test-75534/.