CSC 561 Project Proposal – Erika Rumbold

In the current day in age, streaming services are the main means of consuming digital media – be it movies, TV, or music. As such, more and more services have emerged in competition with each other to gain our usership. For film and television, many streaming services feature exclusive content (e.g., Netflix original series) that make it worthwhile for users to subscribe to multiple. Music streaming services, however, host a lot of the same content, so users tend to choose one as their go-to streaming service. As consumers, we want to make informed decisions about how we spend our money, but it can be difficult to decide when there are so many streaming services to choose from.

There are numerous articles that highlight and compare the different music streaming services. In their efforts to appeal to a wide audience, however, these articles take a very generalized approach, recommending each of the services depending on whatever type of user you may be (e.g., CNET recommends Tidal for rock and urban fans but YouTube Music for Android users). For this project, I will make a comparison of music streaming services with a more analytical approach.

For this project, I plan to use Spotify, Apple Music, Amazon Music, and Tidal. My analysis will have both an objective analysis component and a subjective component. The objective metric to investigate is the data usage while using each streaming service on the same device, connected to Wi-Fi or with an ethernet connection. The subjective component will be a user study. I will ask a group of people the following questions: 1) What type of phone do you have? 2) Which of the 4 services have you used? 3) Which is your favorite and why? 4) How much does audio quality affect your choice of favorite? (1-5 scale), and 5) How much does data usage affect your choice of favorite? (1-5 scale).

My expected deliverables and timeline are as follows:

- October 23: User study completed, initial investigation of network monitoring methods
- November 6: Network monitoring experiment completed for 1+ service (Midterm Update due)
- November 20: All network monitoring experiments completed
- December 4: Data analysis completed (Demo due)
- December 11: Final report due

The website for my project is erumbold.github.io/csc561-project