After looking into R, I realized that it does not support multithreading. Therefore, I can not use it for my language project. I have since switched to Erlang, which is a functional language that is modeled for concurrent oriented programming. It was first built to do telecom services as a robust and flexible language. The power of Erlang is that its processes/ functions do not share memory or mutate that memory. This makes parallel processing much simpler as you don't have to worry about which process finishes first since they are all independent. This fits telecom services well because when someone wants to send a text. That text doesn't change, it just needs to go from location one to location two, and handling so many messages being sent over telecom requires concurrent programing.

What I've done so far is learned the history of Erlang. I have also found some good videos and sites that teaches Erlang and its philosophy. One of which is learn you some erlang for great good. Which I found funny. I haven't gone completely through it yet, but I have learned the basic syntax and ideologies of erlang. The next step to continue familiarizing myself with Erlang and start creating multithreaded programs. For my presentation I want to show how text parsing can be much faster with multiple treads using erlang. I have written an optimized Java programing for text parsing for a single tread. I want to compare efficiency of a multithreaded program compared to my Java program. I would also like to discuss some of the trade offs of parallel programing. Along with the differences between concurrency and parallelism. For sources I will use, the API for Erlang has some amazing documentation. This along with some of a videos I've watched and learn you some erlang for great good. I should gain a solid understanding of how the language works and what are it's syntax.

Schedule:

11/25 – Have a draft program in Erlang along with start to draft the paper

12/2 – Finish the program in Erlang and have a complete draft

12/6-9 – Do presentation, and revise paper

12/9 – Turn in final draft

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