# CSMC 495 Group 1

# Conclusions

The Stock Service Project had some great lessons learned and learning experience. It was interesting working in a group and organizing the work load. Leveraging collaborative technologies such as Slack made it easier to communicate and receive real time notifications on messages. It also allowed an easy way to share files. Leveraging GitHub allowed us easy version control and updating the source with each of us having access to it. We did run into one snag when a team member needed to be hospitalized with the flu. Other teammates were able to step in and help in keeping the schedule on track. One lesson we learned was to really prove out the implementation better before running down the final implementation. We tested our interaction with Alpha Vantage to request stock quotes with a single stock. Everything worked well so we went ahead and developed the whole app. Once we tried querying thousands of stocks, it fell apart. The Alpha Vantage was unreliable in its responses and would often lock out the requests for a period making it unreasonable to request thousands of stocks. A teammate did some research and found another site to use. We had to strip out the Alpha Vantage implementation and replace with a whole new communication. It worked out in the end but if more proof of concept testing would have been done earlier on, it would have saved time since the implementation would not need to have been done twice.

One limitation we have is an internet connection. It may have been a good idea to deploy a master list and store it on disk, updating whenever we have internet connections. This way if the user does not have internet connectivity they could still look, and filter based on the last known values. There is also a possibility if the user keeps opening and closing the app rapidly, the IEX Trading site that is used to download the quotes, will suspend the IP Address from requesting for a while. We could have implemented a way to know we queried recently and do not query again for a set time at startup. We do restrict querying for more than once per 5 minutes once the app is up. Constant closing and opening the app could circumvent this.

Overall the experience was great in planning, designing, and working in a team on a project. It was nice to see it completed and working as well! Our team looks forward to using our experience and knowledge gained through this exercise and apply it in the work environment.