EE/CprE/SE 492 Biweekly Report 1

August 25 - September 9

sddec18-13: Asset management - Financial Factor Discovery - "Value"

Client: Principal Global Investors

Advisor: Chinmay Hegde

#### **Team Members**

Carter Scheve — Communications Lead

Nathan Hanson — Project Progress Tracker/Manager

Caleb Utesch — Meeting Scribe

Jack Murphy — Research Analyst

Samuel Howard — Lead Engineer

Alex Mortimer — Project Manager

### **Biweekly Summary of Progress**

This is the first biweekly report for our senior design project for this semester, and we've mainly been spending time getting back up to speed and establishing a baseline for our project for the remainder of the semester during this time period. One of main events during this reporting period was making a trip to Des Moines for an onsite meeting with our client, Principal Global Investors. During this meeting, we went over several documents that helped define the scope of our project for the rest of the semester. We learned that the scope of our project has somewhat changed, and we will be moving in a slightly different direction with it than we previously thought. We also met a few new company employees who may be able to provide technical assistance with aspects of our project such as data aggregation and historic weekly estimations of things like volatility and cross-sectional variance.

During this period we also gave our presentation for the first PIRM review to several other senior design teams and the instructor. We received feedback from those other teams about our presentation and our project as a whole. There's a good amount of feedback to sift through, and we will make sure to try and incorporate any useful suggestions that fellow peers gave into our project if possible.

# **Individual Contributions**

Meeting Hours: 2 + 2.5 + 2 = 6.5

Team Member	Contribution	Weekly Hours	Total Hours
Carter Scheve	Started contacting client and advisor. Talked with them about semester plans. In person meeting with client in Des Moines and talked about the plans. Revisited last semester python code to see where I left off and some ideas for the semester. Looked at different ways to implement the clients requested deliverable data analysis tool	8	8
Nathan Hanson	Attended meeting, reviewed material given to us by client. Started brainstorming possible approaches to client's new goals.  Began development environment setup.	8	8
Caleb Utesch	Took notes at all meetings, worked on presentation prep, and started reviewing feature selection code from last semester to refresh on how the process is implemented.	8	8
Jack Murphy	Went to an initial semester meeting with our client in Des Moines. Met some new people that we will be working with as well as went over new information for this semester. Reviewed some feature selection code that I worked with last semester	8	8
Samuel Howard	Drove to meeting, and started to review code changes necessary for the new database and direction of development.  Also moved development process to new laptop, and started working with power-bi.	8	8
Alex Mortimer	Attended the client meeting along with preparing for and giving the PIRM presentation in class. Was unable to attend the meeting Monday, September 10 because of an interview, but will get caught up with the material missed and continue work from there.	6.5	6.5

### **Pending Issues**

- We're still waiting on getting granted access to the AWS EC2 instance and Postgres database on AWS that our client has set up for us, which is where the data that we will be using is stored
- There are documents that our client is going to send us to interface with their workflow to schedule tasks, document progress, and know more about the project
- Need to learn about different data aggregation techniques that our client is expecting us to use, and how to implement them on our new given dataset

## **Plans for Upcoming Reporting Period**

- Once we're granted access to the database, all team members will start working on aggregating the given data and comparing it to the previous dataset we worked with last semester.
- All team members will continue looking into Power BI and formulating plans for the visualization tool
  that our client would like by the end of the semester. It seems most likely that the solution will involve
  a web application at this point.