sdmay19-06: Quantitative Research Modeling Library
Week 6 Report
October 20 - October 26

Client: Joseph Byrum
Advisor: Srikanta Tirthapura

Team Members
Josiah Anderson — *Meeting Facilitator*
Doh Yun Kim — *Scribe*
Gabriel Klein — *Report Manager*
Drake Mossman — *Communication Manager*
Nathan Schaffer — *Overseer*
Jacob Richards — *Quality Assurance Manager*

Summary of Progress this Report
This week was mostly focused on the midpoint presentation we gave to our client in Des Moines. This presentation included our research into their problems so far, our interview results, our scope and plan for the project going forward, and our future deliverables and timeline. We also fielded questions from the several employees of our client who came to listen. In addition to this, we also got the server we will be using for development up and running along with the test database. Finally we began designing the first stage of our pipeline which includes data aggregation and creating factor portfolios.

Past Week Accomplishments
Josiah Anderson
- Worked on connecting to the AWS server
- Prepared and presented midpoint presentation for our client in Des Moines
- Continued looking at DRP documents and how we can connect pieces of the DRP system
    - Met with the team to define our design concepts and plan

Doh Yun Kim
- Planned out interface design for the 'strategy' module (defining inputs and outputs)
- Wrote basic scripts to test out feasibility of said designs (not feasibly)
- Revised project plan document based on new scope

Gabriel Klein
- Prepared to and presented our progress to our client onsite
- Setup our AWS server
    - Troubleshooted port and filepath issues with client
- Wrote a script to retrieve data from our test database
- Revised our solution plans based on new project scope

Drake Mossman
- Prepared for midpoint presentation in Des Moines
- Defined config file format for strategy specification
- Researched Quantopian and Quantiacs

- Investigated strategy / portfolio specification

Jacob Richards
- Prepared and presented midpoint presentation to client in Des Moines
- Connected to server
- Reviewed Stock Selection code

Nathan Schaffer:
- Presented midpoint presentation at Principal
- Researched data aggregation methods
- Connected to AWS resources

Pending Issues
There are no pending issues at this time

Plans for Upcoming Reporting Period
Josiah Anderson
- Research ways to integrate external Python modeling scripts into the pipeline that we have began implementing
- Work with the rest of the team to develop a design plan to take stock level data from the database to portofolio level data that can be used for modeling

Doh Yun Kim
- Define what a portfolio should be, and decide how to define interface between the SQL and the portfolio
- Plan out future pipeline design for the modeling stages

Gabriel Klein
- Define interface between user and pipeline for portfolio strategies
- Work on parsing config files to construct SQL queries for the database
- Begin planning the model phase of the pipeline

Drake Mossman
- Assist with implementation of data aggregation prototype
- Become more familiar with our server and database
  - Practice queries on data and analyze format

Jacob Richards
- Work on QA for Git
- Begin planning on next phase of pipeline

Nathan Schaffer:
- Look into the ability to call scripts to the config file
- Data aggregation research

Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Josiah Anderson	Midpoint presentation, server, design development	12	48.5
Doh Yun Kim	Planned interface, feasibility testing, revised scope	8	40.5
Gabriel Klein	Midpoint client presentation, server setup, solution plans revision	9	48.5
Drake Mossman	Midpoint presentation, interface design, quantopian/quantiacs research	8	42
Nathan Schaffer	Midpoint presentation, Data Aggregation Research	7	36
Jacob Richards	Connection to server, midpoint presentation, review code	7	36