sdmay19-06: Quantitative Research Modeling Library

Week 11 Report April 8 - April 14

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 our team continued making progress on testing and documenting the pipeline as well as starting thinking about how we will complete the deliverables for the class. We were finally able to get our CI test system up and running which is now able to confirm that any new commits made to the pipeline are not breaking the build. We also finished integrating the pipeline together with the exception of one small bug in stock scoring. As the semester closes we will continue working on deliverables such as an operation manual for our pipeline for our client and the poster and final report required for the class.

Past Week Accomplishments

Josiah Anderson

- Worked on the final poster
- Continued working on database documentation

Doh Yun Kim

- Finished database storing for stock scoring
- Created number of unit tests for models
- Helped Drake with clarification of Model class

Gabriel Klein

- Fixed the CI test environment to successfully run the current suite of tests
- Verified our aggregation results were correct (within some tolerance)
- Wrote an operation manual for the aggregation portion of the pipeline

Drake Mossman

- Improved clarity of Model class
- Got semi-realistic data running all the way to final stage of pipeline
- Started rough documentation of dataframe contracts at points in pipeline
- Added some safety checking to enforce data contracts

Jacob Richards - Worked on Final Report

Nathan Schaffer:

- Finished documenting entire stock scoring file
- Contributed to operational manual for stock scoring step of pipeline
- Started stock scoring unit testing

Pending Issues

With CI tests up and running and data to check the correctness of our aggregation with, we no longer have any pending issues!

Plans for Upcoming Reporting Period

Josiah Anderson

- Finish database documentation
- Finish the poster
- Start on the final presentation

Doh Yun Kim

- Work on final report
- Finish unit testing for modeling
- Finish CI testing for modeling

Gabriel Klein

- Work on the final report/poster/presentation

Drake Mossman

- Assist with testing and modifications to Stock-Scoring
- Documentation of dataframe constraints through pipeline
- Assist Principal team with use-case testing as needed

Jacob Richards

- Continue working on Final Report
- Assist with any other work that needs to be completed

Nathan Schaffer:

- Finish Unit testing
- Help get get stock scoring part of pipeline fully functional
- Finish stock scoring part of operation manual

Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Josiah Anderson	Poster, Documentation	7	170.5
Doh Yun Kim	Stock Scoring, Model Testing	7.5	154
Gabriel Klein	CI Fixes, Aggregation Correctness, Aggregation Manual	8.5	180
Drake Mossman	Integration and in-code documentation	9	168.25
Nathan Schaffer	Documentation, Operation manual	7	138
Jacob Richards	Final Report	6	140.25