

**sdmay19-06: Quantitative Research Modeling Library**

Week 10 Report

April 1 - April 7

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*

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**Summary of Progress this Report**

This week our team got to work on testing and documenting the pipeline. The aggregation portion now has a test suite of unit tests for ensuring the format of the data is correct. We also have almost all of the code documented inline save for the modeling section, as well as some documentation being written up for the database side of things. Other progress made this week included some more of the little remaining integration work we have to do. Hopefully we should have the pipeline as a whole complete by the end of this next week. We also put in some more time into getting our CI testing up and running which should be ready to work soon.

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**Past Week Accomplishments**

Josiah Anderson

- Communicated with Josh Z about the views for modeling and policy
- Created html documentation for the factor\_aggregation.py
- Started writing documentation for the database

Doh Yun Kim

- Added database functionality to modeling
- Corrected some bugs that showed up with example models
- Helped Drake with integration with stock scoring and modeling

Gabriel Klein

- Added the ability to ignore the saving or loading functionality as desired
- Wrote a test suite for the aggregation portion of the pipeline
- Started making some changes to try and make aggregation more efficient

Drake Mossman

- Started Integration of all DRP stages
  - Got a test running with all stages passing data
  - Evaluated areas that need more work to finish integrating

Jacob Richards

- Worked on Materialized Views
  - Got feedback from Josh on Views
- Created Test Database on CI Server
- Worked on connecting Test Database to CI Runner for testing
- Installed psycopg2 to CI Server

Nathan Schaffer:

- Completed package merge to master
  - Documented stock scoring code
  - Research if class structure is correct
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## Pending Issues

No new pending issues. CI tests are now being worked on again, and we're still waiting on our client to provide us with data for testing correctness.

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## Plans for Upcoming Reporting Period

Josiah Anderson

- Finish writing database documentation
- Make the poster
- Start on the final report

Doh Yun Kim

- Start final report
- test suites for CI server and some integration testing

Gabriel Klein

- Get the aggregation test suite running on the CI server
- Write the operation manual for the aggregation portion of the pipeline for users and developers
- Use extra time to try and make aggregation more efficient

Drake Mossman

- Improve accuracy of stubbed function for factor-policy generation
  - Test Stock Scoring implementation with realistic factor-policy
- Store Factor Policies and Stock Scores in Database

Jacob Richards

- Get Test Database fully integrated with CI Runner
- Fix Materialized views for Josh

Nathan Schaffer:

- Start contributing to operation manual
  - Unit testing of stock scoring class
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## Individual Contributions

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<b>Team Member</b>	<b>Contribution</b>	<b>Weekly Hours</b>	<b>Total Hours</b>
Josiah Anderson	Documentation, DB user guide	6	163.5
Doh Yun Kim	Modeling/database/stock scoring integration	5	146.5
Gabriel Klein	Ignore saving/loading, aggregation test suite	7	171.5
Drake Mossman	DRP Integration	7	159.25
Nathan Schaffer	Merge to master, Documentation	6	131
Jacob Richards	Postgres Test Database Setup, Materialized Views, Connecting Runner to Test Database	12.5	134.25