

sdmay19-06: Quantitative Research Modeling Library

Week 10 Report

November 21 - December 2

Client: Joseph Byrum

Advisor: Srikanta Tirthapura

Team MembersJosiah 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 period we mostly spent on preparing our project for the end of the semester and the beginning of the next one. We spent a lot of time updating our various project documentation with updated information and understanding and created and practiced a presentation for our faculty panel. We also got our continuous integration system up and running and got our codebase prepared for the beginning of the next semester. Finally our website was updated with all of our current progress and documentation.

Past Week Accomplishments

Josiah Anderson

- Updated design doc and Project plan to meet the current status of our project
 - Problem and Needs statements
 - Finalized functional and non-functional reqs
- Created our faculty presentation

Doh Yun Kim

- Updated the following sections in the Project Plan and Design document:
 - Gantt chart to reflect current progress and for better visibility
 - Put in a more detailed design analysis of our current design plan
 - Updated our implementation issues and challenges
 - Showed simulation of current progress made on our progress
- Help revise final presentation slides

Gabriel Klein

- Revised project documents
 - Updated functional/non-functional requirements
 - Updated task approach
 - Updated interface specifications
 - Updated team website information
 - Prepared detailed design portion of presentation
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Drake Mossman

- Project Plan
- Described Operating Environment
- Rewrote Conclusion
- Created Work Breakdown Structure
- Revised User Interface Description
- Design Document
- Updated Risk Log

Jacob Richards

- Updated Functional and Non-Functional test sections for Design Doc and Project Plan
- Finished CI set up
 - Created Secret Variables in Gitlab
 - Connected Runner to Gitlab
 - Created example python unit test to confirm CI is working

Nathan Schaffer:

- Updated assumptions and limitations section for Design doc and Project plan
 - Prepared Problem Statement section of presentation
 - Updated Risk Management chart
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Pending Issues

Some specific design/implementation details for the next few modules on the DRP 2.0 are not as fully fleshed out as we hoped yet. Our work on this was interrupted by work necessary for the end of the semester, but we'll get back to it quickly as the next one begins.

Plans for Upcoming Reporting Period

Josiah Anderson

- Presenting our semester progress to the faculty panel
- Document current functions and classes

Doh Yun Kim

- Test existing R wrapper with current project implementation
- Plan out "Observe valued: calculate model performance" step

Gabriel Klein

- Write tests for the existing codebase after consulting Jacob for framework
- Help flesh out design details for the next modules (modeling, predictions, factor policy)

Drake Mossman

- Set up Python IDE for AWS server development
- Look into Power BI dashboards for interface design

Jacob Richards

- Help write tests for existing code
- Prepare for development on next modules

Nathan Schaffer:

- Research scoring stocks modules
 - Further research into other DRP modules
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Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Josiah Anderson	Problem statement, faculty presentation	14	80.5
Doh Yun Kim	Project docs, design doc, edit Presentation	8	71
Gabriel Klein	Project docs, team website, detailed design presentation	13	83
Drake Mossman	WBS, Operating Environment, Risk Log	9	76
Nathan Schaffer	Design Doc, Presentation, Project Plan	7	61
Jacob Richards	Design Doc, Project Plan, Presentation preparation, gitlab CI	7	64.5