

EE / CprE / SE 491 – sdmay19-07

Real Estate Portfolio Optimization

Week 4 Report

Monday, September 29 – Sunday, October 07

Client: Principal

Faculty Advisor: Chinmay Hegde

Team Members:

Blake Roberts - Project Manager / Backend
Colton Goode - Meeting Scribe / Backend
Kevin Johnson - Test Engineer / Frontend
Leelabari Fulbel - Meeting Facilitator / Frontend
Nickolas Moeller - Report Manager / Backend

Weekly Summary

We continued to research Markowitz. We met with Principal Financial and discussed the theory and how to apply Markowitz with the data that was provided. We started implementing a first-pass Python script. We started building frontend mockups.

Past Week Accomplishments

- Meeting with client - Everyone
- Research into portfolio optimization and modern portfolio theory (MPT) - Everyone
- Made data migration and api python scripts for test data - Blake
- Research useful libraries in Python useful for data analytics - Blake
- Excel concept - Nick
- Frontend Design for Portfolio Management Page
- Frontend Design sketches for Base Page and Options pages - Kevin

Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Blake Roberts	Basic Markowitz implementation in Python	6	18
Colton Goode	Markowitz optimization in Python, testing current algorithms	6	17
Kevin Johnson	Starting creating mockups for frontend side of application	6	16
Leelabari Fulbel	Starting creating mockups for frontend side of application	6	6
Nickolas Moeller	Built proof-of-concept using Excel and continued learning Python	7	17

Pending Issues

- Limited understanding of project requirements and constraints
- Lack of implementation knowledge on MPT optimization

