EE / CprE / SE 491 – sdmay19-07

Real Estate Portfolio Optimization

Week 2 Report

Wednesday, September 12 – Wednesday, September 19
Client: Principal
Faculty Advisor: Chinmay Hegde

Team Members:

Blake Roberts
Christine Hicaro
Colton Goode
Kevin Johnson
Leelabari Fulbel
Nickolas Moeller

Past Week Accomplishments

- Meeting with advisor - Everyone
- Research into portfolio optimization and modern portfolio theory (MPT) - Everyone
- Decided to focus effort on developing with Python - Everyone

Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Blake Roberts	Researched portfolio optimization and MPT (I.E. Markowitz/Black-Litterman)	4	6
Christine	Completed more research on Markowitz/Black-Litterman; looked up examples of applying each	2	4
Colton Goode	Researched portfolio optimization and Markowitz and Black-Litterman analysis. Coded examples in python	3	5
Kevin Johnson	Read the Markowitz and Black-Litterman Model PDF's sent to us by our company contact.	2	4
Leelabari Fulbel	Looked at implementations of Black-Litterman Model	2	4
Nickolas Moeller	Studied Python optimization examples and the provided literature and data	2	4

Pending Issues

- Lack of understanding of portfolio optimization - Everyone
- Currently just a high level understanding of a on the project requirements
- Lack of implementation knowledge on MPT optimization
- Lack of knowledge on the data set

Plans for Coming Week

- Continue research into MPT (Specifically Markowitz and Black-Litterman) - Everyone
- Research into Real Estate Investment: Terms and concepts, strategies, players involved, environment, etc.
- Research useful libraries in Python useful for data analytics
- Get a feel for the requirements, then start brainstorming components needed for the backend functionality and frontend UI
- Video call with client to discuss the project so far and the direction it needs to go