EE / CprE / SE 491 – sdmay19-07

Real Estate Portfolio Optimization

Weekly Report 15

Monday, March 11 – Sunday, March 24
Client: Principal
Faculty Advisor: Chinmay Hegde

Team Members

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

Past Week Accomplishments

- Spring Break
- Created a User Testing Plan with a Google Form. Forms does most of the work by compiling multiple responses.
- Power BI Comparison Report - Kevin
    - The Comparison report is formatted
- Optimization Engine - Blake
    - Region Constraints
- Constraints - Lee
    - Leelabari worked on saving constraints to the database.
    - Leelabari also set the foundations for saving constraints to csv files.

Individual Contributions

Team Member	Contribution	Week Hours	Total Hours
Blake Roberts	Region constraints	6	100
Colton Goode	Power BI REST API - Working with datasets (CRUD)	6	104
Kevin Johnson	Edits to comparison report	6	97
Leelabari Fulbel	Working on User constraints saving into database. Tested the saving	6	98
Nickolas Moeller	User Testing Plan	6	102

Pending Issues

- Testing Form needs to be touched-up
- Kevin
  - Still need to figure out how to push dataset to power bi report for embedding
  - Once this is complete, will need to figure out how to set up dynamic formatting
- Some issues exist with the Power BI REST API rejecting requests to work with datasets. The error codes indicate it is likely due to a bad request (how it is formated).

Plans for Coming Week

- Leelabari will work on saving constraints to a json file as well as continuing to debug the saving of constraints to the db.
- Expand on how we will use User Testing results and iterate on the Form
- Kevin
  - Continue improving Comparison report
- Debug issues with the REST API requests for working with datasets. Once these are resolved then the frontend should be able to send new data for the report
- Finalize Power BI embedded report authentication approach

RASIC

R: Responsible
- The team member primarily responsible for the task's completion.

A: Approve
- The team member responsible for approving the task's completion.

S: Supporting
- The team member(s) who support the task's completion.

I: Informed
- The Principal team member(s) who are informed of decisions, progress, and completion associated with the task.

C: Consulted
- The Principal team member(s) who serve as Subject Matter Experts or key stakeholders for the task or project as a whole.

Past Week RASIC:

3/11/2019										
	Team Members					Principal Team				
Task	Blake	Cole	Kevin	Lee	Nick	Ben	Jonathan Ling	Jonathan Frank	Action	Notes
Review capabilities for constraints persistence	S				R					
Backend user constraints	R									Based on feed back from our mid-point, we should allow for user defined custom fields to be constrainted on
Usability Testing Plan					R					A standard plan in which to gather data about the usability of our application
Dynamic Covariance Matrix Calculation	R									Right now, expected return calculation only works for the ncreif portfolio because of how the covariance matrix calculation works. Need to fix that.
Database to Power BI events interface		R								We need to work on an interface for sending optimization data from the database to a Power BI dataset

Next Week RASIC:

3/25/2019	Team Members					Principal Team			Action	Notes
Task	Blake	Cole	Kevin	Lee	Nick	Ben	Jonathan Ling	Jonathan Frank	Action	Notes
UI Constraints to Database	S			R						
Database to Power BI events interface		R								We need to work on an interface for sending optimization data from the database to a Power BI dataset
PBI Dashboard			R							
Finalize Power BI Embedded authentication approach	R									The code from the demo which embedded the report is not set to go into master. The code was a little hacky, and needs to be pollished and committed.
Usability Testing Plan					R					