

# EE / CprE / SE 491 – sdmay19-07

## Real Estate Portfolio Optimization

### Weekly Report 12

Monday, February 4 – Sunday, February 10

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

- Added a Model mixin to help with CRUD operations on database tables - Blake
  - This was in preparation for uploading new portfolios
- Added Portfolio asset updates via admin page of the application - Blake
- Got deletion working for the constraints - Leelabari
- Integrated inputs branch to Blake's frontend branch - Leelabari

## Individual Contributions

Team Member	Contribution	Week Hours	Total Hours
Blake Roberts	Made a Model mixin/super class to help with CRUD operations on database tables. Also allowed for editing portfolio asset values via the admin page.	6	76
Colton Goode	Researched the use of PowerBI and Power BI embedded, looked into embedding PowerBI into the current Dash app in an REST API	4	76
Kevin Johnson	Researching how authentication can be performed in python using an example in .NET	6	74
Leelabari Fulbel	Completed integration into Blakes code based. Allowing deletion.	6	75
Nickolas Moeller	Researched Power BI data streaming	6	75

## Pending Issues

-

## Plans for Coming Week

- Need to finish integrating Power BI into the current application as a REST API so it can be pulled seamlessly into various pages. - Cole
- Need to work with Cole to integrate authentication for a Power BI account so visuals can be shown for anyone using our application - Kevin

## 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:

Task	Team Members					Principal Team			Action
	Blake	Cole	Kevin	Lee	Nick	Ben	Jonathan Ling	Jonathan Frank	
Embed Test Report into dash app using REST API's		S	R						
UI Markowitz Constraints	S			R					
Power BI Python abilities					R				
Uploading a new portfolio	R								

### Next Week RASIC:

2/10/2019										
Task	Team Members					Principal Team			Action	Notes
	Blake	Cole	Kevin	Lee	Nick	Ben	Jonathan Ling	Jonathan Frank		
Embed PowerBI into dash app using REST API's		S	R							Right now we have code to embed a report into our application; however, it authenticates via browser cookies. We will be focusing on authentication via REST API. If this is completed, then we'll move to pulling and embedding the dashboard created during the upcoming design meeting.
UI Markowitz Constraints	S			R						Collecting constraints from the user and translating them into backend optimization engine constraint objects.
Power BI Python abilities					R					How PBI is able to execute python scripts and if we can communicate with our backend through it
Uploading a new portfolio	R									Includes the data format for new portfolios (csv/xlsx with predefined/required column headers)
Implementing new persistent data structures	R									This will include the optimization, optimization run, constraint and optimization weight tables.