# W209-Portfolio Optimization

**Usability Test Shuang Chan** 

# **Task List**

## 1. Create a custom portfolio and use the tool to optimize the allocations

- a. Compare the original allocations with the optimized allocations
- b. Compare the performance indicators of the original allocations to those of the optimized allocations

# 2. Create a custom portfolio and use the tool to run an asset correlation analysis

- a. Name some examples of asset pairs that are:
  - i. Highly correlated
  - ii. Negatively correlated
  - iii. Not correlated

### 3. Create a custom portfolio and use the tool to run a performance analysis

- a. Compare the Growth and Drawdown with the selected benchmark
- b. Compare the Volatility and Sharpe Ratio with the selected benchmark

# **Test Participant**

1. 04/12/2017, Mike Cahaly

Video Recording:

https://drive.google.com/drive/u/1/folders/oBwmzgtMtELHgRjlSd2o4aG9QRUU

# **Test Note**

Mike was able to complete the tasks with minimal help from me. He had no difficulty navigating the website and finding the features needed for the tasks. He did make a couple of mistakes when specifying certain parameters as the UI did not provide sufficient information on input format and validation.

The most challenging area for Mike was to interpret the results due to the lack of domain knowledge and terminology. It also took him awhile to understand the correlation matrix. I think proper legends may have help.

Overall, Mike represented our average investor who will require help on result interpretations. A small learning curve is expected for these type of users.

# **Debriefing Question**

1. Is the website easy to navigate? Is it easy to find and use the tools?

Answer: Yes

2. Is it easy to input data (dates, portfolio weights, etc.)?

Answer: Yes

3. Are the interactions responsive or slow?

Answer: The UI is responsive.

4. Is the presentation of the data and charts intuitive? Do you have difficulty interpreting the results?

Answer: The data and charts are not intuitive for average investors. Need help to interpret the results.

5. What do you think can be improved?

Answer: Adding personalization will help. Mike pointed out the Fidelity website with many personalization features.

# **Prioritization List**

### 1. Must

- a. Add input format validation
- b. Add legends to the correlation matrix
- c. Add annotations to help user to interpret the results

### 2. Should

a. Improve the responsiveness of the Performance page

### 3. Could

a. Add personalization features (remembering user's portfolio)

### 4. Won't

a. Other personalization features such as color, font and layout