

Application Development Final Exam

Deliverable:

The final exam consists of one Jupyter Notebook (200 points).

Overall/Description/Directions:

You will create two *industry based* mutual funds. Each mutual fund must consist of a least three (3) industry similar stocks. You will analyze and compare the two funds. You must include an explanation of which fund outperformed the other and how it did so. After the comparison of the mutual fund, you will create a third fund based on the best stocks of the original mutual funds (selecting at least three of the best) and compare the new fund against the original two with your analysis and opinion of the new mutual fund.

General steps (very general):

- 1) Create two industry based mutual funds
 - a. Select funds
 - b. Download data for each stock
- 2) Group plot each mutual fund
- 3) Benchmark each mutual fund
- 4) Compare benchmarks
- 5) Explain the higher performing mutual fund
- 6) Create a third mutual fund from the two original funds
- 7) Benchmark the new mutual fund
- 8) Compare/Analyze the benchmarks
- 9) Conclusion

Additional information:

*You can breakdown your mutual stock choices to be as broad or narrow as you prefer.

The Global Industry Classification Standard was developed by index providers MSCI and Standard and Poor's. Its hierarchy begins with 11 sectors which can be further delineated to 24 industry groups, 68 industries and 157 sub-industries. It follows a coding system which assigns a code from each grouping to every company publicly traded in the market. The GICS coding system is integrated throughout the industry allowing for detailed reporting and stock screening through financial technology.

11 broad GICS sectors commonly used for sector breakdown reporting include the following:

Energy
Materials
Industrials
Consumer Discretionary
Consumer Staples
Health Care
Financials
Information Technology
Telecommunication Services
Utilities
Real Estate