

## Group project: SIGTech platform

SIGTech <https://www.sigtech.com/> provides us free access to its platform. This gives us an opportunity to learn industry standard Python coding for financial applications. This project aims to learn from several sample notebooks provided by SIGTech and adjust them slightly to our own applications.

1. Form groups among yourselves. Each group consists of around 5 people.
2. Coordinate within each group so that no more than 2 people log in the SIGTech platform at the same time.
3. Understand the notebooks 1 to 5 in the “Sample notebooks” of the SIGTech platform. These notebooks give introduction of the platform.
4. You need to create your own folder and work inside your folder. The sample notebooks cannot be changed.

The project consists two parts. We first understand several sample notebooks provided by SIGTech in the Part I. Then adjust one sample notebook slightly for our own applications to see the codes in action.

### Part I: (15 points)

In the “additional\_sample” folder, choose one of the following notebook:

- a. analysis/SIG\_parameter\_analysis
- b. analysis/portfolio\_optimization
- c. commodities/SIG\_commodity\_calendar\_spread\_strategy COMBINED with macro/SIG\_future\_basket\_example
- d. macro/SIG\_macro\_example
- e. macro/SIG\_macro\_long\_only\_trend\_example

Choose one of the note book above (two notebooks for option c). Read through the notebook and write an extended documentation for the notebook. Comment around each block of codes what this block aims to do in the markdown environment.

### Part II: (15 points)

Following the notebook that you studied in part I, construct your own trading strategy in a similar application. Testing your trading strategy using the codes provided by the sample notebook.

If you go beyond the sample notebooks provided, up to 5 additional points can be rewarded.

Write your application in a separate notebook with appropriate markdown comments. In the beginning of your notebook, please explain what you plan to do and the main idea of your strategy.