

Python for Finance (1104)

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1 Introduction

The aim of the project is to let the student combines his financial knowledge with his python skill to produce a report using real world data.

By trying to keep the spirit of programming as much as possible, the student has to find a financial topic, data and implement it using Python.

This project will impact 60% of the final mark for this course.

2 Requirement

2.1 Python

The financial model must be implemented using Python. The creating of an environment as seen during course is not mandatory but desirable.

2.2 Data

The data used to produce the project should be Open Source, accessible and the source of the data should be mentioned in the report.

2.3 Topic

The topic is left to the student appreciation. Here is a non-exhaustive list of possible topic :

- Basic trading strategy,
- CAPM,
- Modern Portfolio Theory,
- Option Pricing,
- Financial data visualisation,
- Financial dashboard (Streamlit);
- etc...

2.4 Report

Alongside the code, the student has to produce a report (excel, word, PDF, streamlit WebApp) where the student give information about the financial model used, result coming from the model and some information about the python project structure.

2.5 How to send the project

The student can put his project into a Github repository (desired) or he can send by email to the professor the project containing the code, data (if external data used like excel or csv) and report into a ZIP file.