Project

Overview

- The latest version of the project we have been working on during the course can be installed directly using `pip`.

```
pip install pybacktestchain
```

You can see the source code/ documentation in
https://pypi.org/project/pybacktestchain/.

- Your main goal is to create your own python package, which will import `pybacktestchain` to implement new functionalities.

- All projects have to be implemented individually.

Project Basics

- Package structure from `cookiecutter` template.

- Package dependencies using `poetry` .

- Version control with `semantic-release` .

- If you need to refresh anything, refer to the slides or the following documentation
  https://py-pkgs.org/welcome

- Part of the requirements is to be able to have a history of the changes made to the package.

- Tests

- Proper documentation (all .md files)

- Follow the instructions in the link above to publish your package in `pypi` , do not try to publish in `test-pypi` , it is not worth it and is not reliable.

Project Requirements

- Create a new package that imports `pybacktestchain` and implements new functionalities. (You can create new functions or overwrite existing ones) E.g.
  - Functionality with new asset classes together with their respective data structures and investment strategies.
  - A properly developed user interface to interact with the package.
  - C-implementation of the main functions of the package.
  - A cryptocurrency implementation on the blockchain that compensates adding new blocks or profitable backtest ideas.
  - Proper distributed computing implementation to backtest strategies in parallel.
  - Web services to backtest and collaborate with the development of investment strategies in a team.

What do I expect from you?

- Same standards as seen in class. Proper documentation, usage of version control, and code quality. Check the official style guide for python code if required https://peps.python.org/pep-0008/

- You can use LLMs to help you code, but you must understand what you are doing. I also use LLMs to code, so I will know if you understand or not the code.

- Originality, you have enough time to develop something new and interesting.

- Having all the development process documented in the repository really supports your cv in job applications.

- If you are not sure if your idea is good or not, send me an email and visit me during office hours.

- Your grade will be based on your project having the minimum requirements and the originality/implementation of the idea.

Project Deliverables

- Github repository with the package.

- Package published in `pypi`.

- Send me an email with both links before January 17 2025 11:59 PM.

- I will provide office hours on the following dates (please send me an email in advance):
  - Thursday Dec 12 2024 - 13:00-15:00
  - Tuesday Jan 07 2025 - 10:00-12:00