

COS30018 - Option C - Task 1: Setup

You should be able to download the current project code base (**v0.1**) from Canvas. It is a single Python file: `stock-prediction.py`. The program is created based on a YouTube tutorial and has many issues. The project leader is aware of the issues and would like to improve this code. The project leader also identifies an interesting project (**P1**) on Github to allow you to learn from so that you can create some ideas to improve your project.

(**P1**) <https://github.com/x4nth055/pythoncode-tutorials/tree/master/machine-learning/stock-prediction>

Your tasks this week:

1. Watch the tutorial YouTube video to learn about **v0.1**:
<https://www.youtube.com/watch?v=PuzY9q-aKLw>
2. Download the code bases of **v0.1** and **P1** to your local machine to test them out.
3. Follow the instructions from the tutorial video and from (**P1**) to setup your environment on your local machine. We strongly recommend you set this up in a virtual environment. Note that both **v0.1** and **P1** can share the same virtual environment as they use the same libraries. Please supply a requirements file for this setup. More details about requirements files can be found here: https://pip.pypa.io/en/stable/user_guide/#requirements-files
4. Test both **v0.1** and **P1** and make sure that you can run them, train the models and get the results.
5. Setup the Github repository for your project and commit **v0.1** to your repo and setup the Wiki page of the project to contain all documentations for the project (including the Weekly reports to be submitted)
6. You should try to compare the performance of **v0.1** and (**P1**). Which one give you a “better” prediction? How do you define “better”? These evaluations & comparisons will need to be reported in your report.
7. Upload your Task 1 Report (as a PDF file) to the project Wiki before the deadline and email your project leader to notify that it is ready for viewing and feedback.

Your Task 1 Report will contain the following details:

- Summaries of your attempt to setup your environment, including details of your requirements file.
- Summaries of your attempts to test the provided code bases (**v0.1** and **P1**) with screenshots.
- Summary of your understanding of the initial code base **v0.1**.

Due date: 11:59pm Sunday 24 August 2025

Assessment Criteria:

You can get up to 10 marks for successfully completing Task C.1.