

## Reflection on Proj1

### 1. What was the original state of your analysis?

Originally, all the code and results were in a single directory. There was no guidance, and the code was messy and hard to read. There were no tests and no main entry either.

### 2. What were the biggest challenges in the transformation?

The biggest challenge was when I put tests files and models in different directories. I couldn't run the files successfully because the interpreter could not find the modules that I imported from other directories. I consulted one of my friends who majors in computer science and decided to import all the modules from the root directory and run every file under it. Then things worked out well.

### 3. Which improvements had the most impact on reproducibility?

I think adding a README.md and making proper comments had the most impact on reproducibility. The former made the installation and usage clear for other users, the latter made it easier to read the code.

### 4. What would you do differently in a future project?

In the future, I will try to write everything in functions and classes and only run things in test files and the main entry. This time, the main functions are somehow long because they were written in large chunks of main functions.

What's more, I will try to name every variable, function, and class better. This time, I renamed some of them, but the naming is still imperfect.

What's more, I will try to incorporate more human-machine interaction in a future project. This time, it is hard to do so because the project was designed long before without interaction but only for verification.

### 4. How long did each major component take to implement?

Structure, version control, and virtual environment: 10 min;

Renaming some of variables: 20 min;

Refining the coding style and commenting the code: 1.5 hours;

Testing: 2 hours;

Main entry: 5 min;

Adding README.md, .gitignore, and requirements.txt: 15 min.

