Programming Best Practices

Learning Objectives

In this project, we will learn the basics of git, GitHub and Huggingface. Have fun!

TODO

1. Clone your GitHub Classroom repo to your local host. (You need to prepare git configuration in your local CLI first)
2. Create a new file called *readme.md* in the repo folder.
3. Write *hello world* in *readme.md* and commit the changes.
4. Push everything so far to the remote repo on GitHub.
5. Create a new branch called *for fun* and inherits everything in *main*.
6. Switch back to *main* branch, change *hello world* to *aloha* in *readme.md*, then commit and push to remote repo.
7. Install Huggingface environment, then use the pretrained ResNet model (https://huggingface.co/docs/transformers/model_doc/resnet) and run an inference on MNIST dataset (you need to resize the images to fit the input size of the model). Commit the inference codes and include the accuracy in your commit message.
8. Pull *for fun* branch into the *main* branch, and resolve the conflict (if there is a conflict). Remember to stop keep the *for fun* branch. The *main* branch now should have *aloha* and all the mint stuff. Commit and push to your remote repo.
9. Reverse the changes to step 3 (so the repo only has a *readme.md* with *hello world* except for this handin_requirements).
10. Checkout back to your latest commit. Document what you have learned in *readme.md* under *aloha*. Commit and push to your remote repo.

Grading Rubrics

There are 10 steps in total. Every step has 10 points. TAs will check your git commit history in your GitHub repo for grading.

Remark

1. Some versions of git/GitHub may have *master* instead of *main* as default branch name.
2. You can only choose to do Practice Assignment this week.
3. Feel free to contact TAs if there is any doubt about this assignment.