

AST3100 “Code development and packaging mini-course” Assignment 1

Due on Mar. 3 2020 at the start of class

The purpose of this first assignment is to start developing the Python package that you will create as part of this course and to play around with `git` and GitHub. To submit the assignment, please send a link to your package’s GitHub page to the instructor and he will monitor your progress there (he will be looking for lots of commits ...).

Task 1: Create your package Following the notes, create the absolute basic skeleton of your package: (a) choose a name; (b) the start of your package’s code (but only a very basic start, we will add the rest later; so something like a single file and a single, small function); (c) a basic `setup.py` file. Test that you can install your code by running

```
python setup.py develop
```

Don’t add `README` or `LICENSE` files at this point, we will do that in the next step.

Task 2: Start your package’s GitHub page Go to your GitHub account and create a new repository for your package, making sure to initialize it with a `README.md`, a `.gitignore` file, and a license.

Task 3: Start the git commit history for your package Clone your package’s GitHub repository to your local machine (use a different directory from where you started the package). Copy the skeleton that you created in Task 1 to this directory and add and commit the skeleton that you created earlier, keeping to the `git` philosophy of committing early and often. When you have done this, push the changes to GitHub; check that they appear correctly there.

Task 4: Implement a first feature in your package Now you should implement a first full-fledged feature in your package, some of its basic functionality. Start a new branch with a good name for the feature and start implementing it, committing liberally along the way. Make sure to add a bug somewhere along the way for the next task. Push your changes to GitHub from time to time. When the feature is finished, merge it into the `master` branch from the command-line.

Task 5: Open an issue on GitHub The feature that you implemented in the previous task has a bug. Pretend that you just found it and open an Issue on the GitHub page describing the issue as discussed in the notes.

Task 6: Fix the issue through a pull request Next, fix the bug reported in the previous task. Start a new branch to fix the bug and fix it (referring to the issue by its number as `#1` in each commit). Once the bug has been fixed, open a pull request to merge the fix back into the `master` branch.