

Homework

1. Create a bare repository on a free online hosting service (such as repo.or.cz or GitHub) to begin Git version control of homework for this class (one folder for each homework, all under the same Git project). Add all previous homeworks as well. As you make commits on your local clone, push the changes to the online repository. Note that everything uploaded to these sites is by nature required to be open source, so if there is anything that you don't want to be uploaded - it will be fine to exclude it. **Turn in your homework for this week by sending an email to us with instructions to clone this repository.**

Homework

2. Begin version control (with Git) on one of your own coding projects (separate from this class - could be research code, a journal article in progress, your thesis, or ideally everything!). You don't need to send this code to us; just include the log (`git log > changelog.txt`) in your homework repository created in problem 1 - we will be looking for a number of commits (i.e. actually make some changes to your code!) and *nice, descriptive commit messages*. The goal here is that you continue to use version control on your projects well beyond this class!

Homework

3. Elections are coming up, and we want to re-use our code to see how things are going! Download the latest prediction data from Intrade into your Week 8 homework folder. **Without moving the base code** from your Week 5 (databases) folder*, load the necessary functions from that code into a new module for your Week 8 folder which parses command-line input using [argparse](#). Allow the user to retrieve information from the database in a user-friendly way from the command line: e.g.

```
python ElectionPredictions.py -c Obama -d 2012-03-28
```

would print out the Barack Obama's closing value on March 28th. Include an option `-p` or `--plot` which shows a plot of all the predicted values for the candidate over time, with the value at the specified date highlighted. Include the necessary checks to make sure the user's path is set correctly to import the code from Week 5.

* Feel free to modify your database code in place if desired, or simply download the solutions and put this in your week 5 folder in the repository created in part 1. We basically want you to be able to create/use/load modules from different folders. We won't be grading on the database work, only the parsing and code communication outlined above.