Data Science for Public Policy

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git and GitHub

Background

Git is a distributed version-control system for tracking changes in code. Git is free, open-source software and can be used locally without an internet connection. It's like a turbo-charged version of track changes for code.

GitHub, which is owned by Microsoft, is an online hosting service for version control using Git. It also contains useful tools for collaboration and project management. It's like a turbo-charged version of Box for sharing repositories created using Git.

At first, it's easy to mix up Git and GitHub. Just try to remember that they are separate tools that complement each other well.

The objective is to create local repositories that track code, and sometimes data, and then push those repositories to GitHub for back-up and collaboration. When someone else edits the code, they can push the changes to a repo

Installation and registration

git installation for Windows

Install Git for Windows. Keep all default selections and **be sure to install Git Bash**. Git Bash is a command line for Windows that is useful for using Git. After installation, you should be able to right click and select `Git Bash Here`.

git installation for Mac OSX

Install Git for Mac OSX. Mac already has the terminal. Open the terminal and type `git`. If everything is properly installed, a list of possible command will show up.

GitHub account

Create a GitHub account. There is no need to associate you account with Georgetown or a Georgetown email address. Many people want to GitHub for personal projects too.

Configure Git and GitHub

The following steps link your local Git to Github.

In any directory on your computer, right click and select `Git Bash Here` on Windows or open Terminal on Mac.

Submit the following with your GitHub username in quotes:

`git config --global user.name "your github username"`

Then, submit the following to ensure that your GitHub username is associated with you computer:

`git config --global user.name`

Submit the following with the email associated with your GitHub account in quotes:

`git config --global user.email "email@example.com"`

Then, submit the following to ensure that your GitHub email is associated with you computer:

`git config --global user.email`

More resources

- [Git Cheat Sheet](#)
- [Happy Git and GitHub for the UserR](#)
- [Git Pocket Guide](#)
- [Getting Git Right](#)
- [Git Learning Lab](#)