Getting started with Git and GitHub

Creating A GitHub Account

You'll need a GitHub account to use Git most effectively, if you already have an account, great! You can skip this step.

1. Point your web browser to github.com/join.
2. Enter your information and follow the on-screen steps to create an account.

Local Installations

I'll be asking you to install both a command line tool **and** a visual tool for working with Git on your computer. Below are instructions for Windows, Macintosh, and Linux.
operating systems.

Windows

Git Bash - Command Line Tool

1. Point your web browser to git-scm.com/download/win
2. Open the `.exe` download and follow the on screen instructions for getting things set up.
3. Once in install is complete, find the program named "Git Bash" and run it. You should see a termainal window. Type `git --version` to ensure the installation was successful. If the installation succeeded a version number should be displayed.

GitHub Desktop - Visual Tool

1. Point your web browser to desktop.github.com.
2. Download GitHub Desktop and open the windows installer. Follow these instructions for instalation.

Macintosh

Git - Command Line tool

Your mac is a Unix-based operating system so you may already have Git installed, otherwise you'll need to install "Command line Tools for Xcode" to get it running.

Testing for Git

Open your Terminal application and type `git --version`, then press Enter. If you see something like this

```
$ git --version
git version 2.15.2 (Apple Git-101.1)
```

… then git is already installed. You can stop here.

Installing Command Line Tools for Xcode

The following should be roughly similar to the instructions you see in the terminal window after typing `git --version`. Feel free to follow those instructions if they are more clear.

1. Open your Terminal application and type `xcode-select --install` the press enter.
   - **If that doesn't work**, point your browser to the
     Apple Developer Login Page
     and sign in with your Apple ID.
     Follow the on-screen instructions until you reach a list of downloads.
   - There, you should download "Command Line Tools (macOS [your macOS version]) for Xcode". Search through the list and try not to download a "Beta" version unless you have to.
     - To figure out your macOS version click the Apple symbol in the top left of your computer then click "About this Mac." The macOS version number should be listed (e.g. 10.13.4) in the dialog that appears.
     - You only need the first two numbers (e.g. 10.13) to match to the package in the downloads list.
   - Download a `.dmg` file of the proper Command Line Tools version. Open the `.dmg` then double click on the `.pkg` file contained within.
2. Follow the on-screen instructions until the installation in complete.

3. Test your installation by running `git --version` in your Terminal application. If the installation succeeded a version number should be displayed.

GitHub Desktop - Visual tool

1. Point your web browser to desktop.github.com.
2. Download GitHub Desktop and open the `.dmg` file. Follow these instructions for instalation.

Linux

Git - Command Line tool

Adapted from @derhuerst

1. Determine which Linux distribution your system is based on. See this list for reference.
   Most Linux systems--including Ubuntu--are Debian-based.

   i. Debian-based Linux systems: copy and paste the following into your terminal Window then press Enter.

   ```
   sudo apt-get update
   sudo apt-get upgrade
   sudo apt-get install git
   ```

   ii. Red Hat-based Linux systems: copy and paste the following into your terminal Window then press Enter.

   ```
   sudo yum upgrade
   sudo yum install git
   ```

2. Test your installation by running `git --version` in your Terminal application. If the installation succeeded a version number should be displayed.

Git Extensions - Visual Tool

I haven't actually used a visual tool on Linux, and GitHub Desktop is still in development for such

operating systems. See a full list of visual tools for Linux here

1. Follow the instructions found at the Git Extensions Webpage.