



Assignment 4: Introduction to Git

1 Overview

I operate from the assumption that you now know how critical it is to use some type of version control system when you are creating not just code, but any collection of one or more files that can change over time. There are several different version control systems, but one of the most popular right now is *Git*. Other competing choices are *CVS*, and *Subversion*, but these do not hold a candle to *Git*.

There are many excellent tutorials on how to use *Git*. I am partial to *ProGit*, which is the one to which I put a link on the course website. It is a free download as a PDF, and I recommend your downloading it. The purpose of this assignment is to introduce you to the basics of *Git* before your first practical exercise in using it. I also strongly recommend that you try the online tutorial from Katacoda: <https://www.katacoda.com/courses/git>.

2 Tasks

Essentially, this assignment asks you to do nothing but read and try out the examples from the book as you go along. Therefore, I have identified a few of the chapters and sections of chapters that you should read to learn enough *Git* to work with it. In the list below, I annotate the readings with tags indicating whether they are required or optional. Of course if you are knowledgeable about a particular area, you may skip the reading in that area.

- *Getting Started*: The only part of this chapter that is optional is the *Short History of Git*. You may also skip *Installing Git* if you plan on using the `git` software on our servers and not on your own machine.
- *Git Basics*: You may skip the sections on *Undoing Things*, *Tagging*, and *Git Aliases*. Although you absolutely need to know how to undo things, this will be covered in the next lesson.
- *Git Branching*: Skip this entire chapter for now. We will cover branching in the next lesson.
- *Git on the Server*: Skip this for now.
- *Distributed Git*: Skip this too
- *GitHub*: You have already set up accounts. You need to read the section on *Contributing to a Project*. Everything else can wait.

3 Due Date

Please complete these readings by Monday September 24. I will soon post an exercise that will be due on Wednesday September 26. If you know enough *Git* already you will be able to do it before then.