Free Tools for Content Creators

A brief presentation about "git" and "GitHub" by
Peter Camilleri

Disclaimers

- I have no association with the "git" team, GitHub, Microsoft, any Linux team, or Linus Torvalds.
- I'm not selling or looking for anything.
- I merely wish to raise awareness about some free software that I think is useful and beneficial.
- My target audience is people who create digital content, especially in written form.
- This is not a course on "git" or GitHub.

What is "git"?

- Git is a distributed version-control system for tracking changes in source content during creative development. Originally for coordinating work among programmers, it can be used to track changes in (almost) any set of files.
- Its goals include speed, data integrity, and support for distributed, non-linear workflows.

What is GitHub?

- GitHub, Inc. is a US-based global company that provides hosting for software development and version control using "git". It is part of Microsoft, which acquired the company in 2018.
- Public repositories have always been free. As of January 2019, GitHub offers unlimited private repositories to all plans, including free accounts.
- As of 2020, GitHub has 40+ million users with than 100 million repositories (and at least 28 million public repositories), making it the largest host of source code in the world.

Where did "git" come from?

- Git was initially created by Linus Torvalds, in 2005, for development of the Linux kernel. It was created to allow work on the Linux kernel to proceed.
 - Existing software packages to do this task were often expensive. Further all were slow and cumbersome. The Linux kernel was so large and complex that something better was needed.
- The word "git" in English slang for an old, unpleasant person.
- To me, "git" is a productivity booster in line with the old expression "git 'er done!" or "Get it done"

Why does "git" matter?

- Creating content is hard work. Losing that work, and then having to do it all over again is so frustrating!
 - In 2007, my computer hard-drive suddenly failed. It cost nearly \$2K to recover the data because I had no backup. All of my code was on that hard-drive.
 - In 2016, it failed again with very different results.
 - In 2018, Fred Fernbach gave a talk about Android application development and mentioned that he had lost 10 applications because of hard-drive troubles.
- This got me thinking... I need to share this insight!

A smattering of "git"

- Teaching how to use "git" and GitHub is way beyond the scope of this talk.
- "git" has so many, commands and many of them are complex and hard to use. That's not what this talk is about.
- So instead, I would like to focus on those simple "git" commands I use nearly everyday. The commands that make "git" and GitHub such powerful productivity tools.

What's New?

- Perhaps the most used git command gets the status info about the repository. Just use:
 - git status
- This will tell you about:
 - Newly added files.
 - Modified files.
 - Files pending commit.
 - If your repository is out of sync with the cloud.

Shampoo Instructions

- Edit / Add / Commit / Push
 - Edit Make needed changes to files.
 - Add Add the changed files to git using:
 - git add <files>
 - git add . Is a shortcut to add all changed files.
 - Commit Make changes part of the repository
 - git commit -m "A message describing the change"
 - Push Send changes to GitHub
 - git push

Occasionally Used Commands

- "init" create a repository.
- "clone" get a repository.
- "pull" pull in updates.
- "log" show a log of commits.
- "mv" move or rename files.
- "rm" remove files.
- "diff" show changes in a file.
- "help" what do I do?

Where do I get "git"?

- Git is hosted at: https://git-scm.com/ or Google "git"
- It is available for Linux, Unix, MAC OSX,
 Windows and Windows Portable. 32 or 64 bit.



More Info

YouTube Search for: "git tutorial"



Git Tutorial for Beginners

• https://www.youtube.com/watch?v=WbwIoQYP6no



Learn Git In 15 Minutes (?)

https://www.youtube.com/watch?v=USjZcfj8yxE



This Talk

 https://github.com/PeterCamilleri/ideas/blob/master/ Talks/

