Older way of change management

diff

diff is used to find differences between two files. On its own, it's a bit hard to use; instead, use it with diff -u to find lines which differ in two files:

diff -u

diff -u is used to compare two files, line by line, and have the differing lines compared side-by-side in the same output. See below:

```
~$ cat menu1.txt
Menu1:

Apples
Bananas
Oranges
Pears

~$ cat menu2.txt
Menu:

Apples
Bananas
Grapes
Strawberries

~$ diff -u menu1.txt menu2.txt
--- menu1.txt 2019-12-16 18:46:13.794879924 +0900
+++ menu2.txt 2019-12-16 18:46:42.090995670 +0900
@@ -1,6 +1,6 @@
-Menu1:
+Menu:
Apples
Bananas
-Oranges
-Pears
+Grapes
+Strawberries
```

Patch

Patch is useful for applying file differences. See the below example, which compares two files. The comparison is saved as a .diff file, which is then patched to the original file!

```
~$ cat hello_world.txt
Hello World
~$ cat hello_world_long.txt
Hello World

It's a wonderful day!
~$ diff -u hello_world.txt hello_world_long.txt
--- hello_world.txt 2019-12-16 19:24:12.556102821 +0900
+++ hello_world_long.txt 2019-12-16 19:24:38.944207773 +0900
@@ -1 +1,3 @@
Hello World
+
+It's a wonderful day!
~$ diff -u hello_world.txt hello_world_long.txt > hello_world.diff
~$ patch < hello_world.diff
patching file hello_world.txt
~$ cat hello_world.txt
Hello World

It's a wonderful day!
```

There are some other interesting patch and diff commands such as patch -p1, diff -r !

Check them out in the following references:

- http://man7.org/linux/man-pages/man1/diff.1.html
- http://man7.org/linux/man-pages/man1/patch.1.html

More Information About Git

Check out the following links for more information:

- https://git-scm.com/doc
- https://www.mercurial-scm.org/
- https://subversion.apache.org/
- https://en.wikipedia.org/wiki/Version_control

In https://git-scm.com/ , scm refers to source control management

Installing Git

The first step on the way to using Git is to install it! The directions found in the Git documentation below are pretty thorough and helpful, check them out for the best method of getting Git onto your platform of choice.

- [Git download page](#)
- [Git installation instructions for each platform](#)

Initial Git Cheat Sheet

Check out the following links for more information:

The [Linux kernel documentation](#) itself, as well as [impassioned](#) opinions from other [developers](#).

You can check out "[Setting your email in Git](#)" and "[Keeping your email address private](#)" on the GitHub help site for how to do this.