Setting Up Git

When we use Git on a new computer for the first time, we need to configure a few things. Below are a few examples of configurations we will set as we get started with Git:

- our name and email address,
- what our preferred text editor is,
- and that we want to use these settings globally (i.e. for every project).

On a command line, Git commands are written as <code>git verb options</code>, where <code>verb</code> is what we actually want to do and <code>options</code> is additional optional information which may be needed for the <code>verb</code>. So here is how Dracula sets up his new laptop:

```
$ git config --global user.name "Vlad Dracula"
$ git config --global user.email "vlad@tran.sylvan.ia"
```

Please use your own name and email address instead of Dracula's. This user name and email will be associated with your subsequent Git activity, which means that any changes pushed to <u>GitHub</u>, <u>BitBucket</u>, <u>GitLab</u> or another Git host server in a later lesson will include this information.

For these lessons, we will be interacting with <u>GitHub</u> and so the email address used should be the same as the one used when setting up your GitHub account. If you are concerned about privacy, please review <u>GitHub's instructions for keeping your email address private</u>.

Keeping your email private

If you elect to use a private email address with GitHub, then use that same email address for the <code>[user.email]</code> value, e.g. <code>[username@users.noreply.github.com]</code> replacing <code>[username]</code> with your GitHub one.

Line Endings

As with other keys, when you hit Return on your keyboard, your computer encodes this input as a character. Different operating systems use different character(s) to represent the end of a line. (You may also hear these referred to as newlines or line breaks.) Because Git uses these characters to compare files, it may cause unexpected issues when editing a file on different machines. Though it is beyond the scope of this lesson, you can read more about this issue in the Pro Git book.

You can change the way Git recognizes and encodes line endings using the core.autocrlf command to git config. The following settings are recommended:

On macOS and Linux:

```
$ git config --global core.autocrlf input
```

And on Windows:

Dracula also has to set his favorite text editor, following this table:

Editor	Configuration command				
Atom	\$ git configglobal core.editor "atomwait"				
nano	\$ git configglobal core.editor "nano -w"				
BBEdit (Mac, with command line tools)	\$ git configglobal core.editor "bbedit -w"				
Sublime Text (Mac)	<pre>\$ git configglobal core.editor "/Applications/Sublime\ Text.app/Contents/SharedSupport/bin/subl -n -w"</pre>				
Sublime Text (Win, 32-bit install)	<pre>\$ git configglobal core.editor "'c:/program files (x86)/sublime text 3/sublime_text.exe' -w"</pre>				
Sublime Text (Win, 64-bit install)	<pre>\$ git configglobal core.editor "'c:/program files/sublime text 3/sublime_text.exe' -w"</pre>				
Notepad++ (Win, 32-bit install)	<pre>\$ git configglobal core.editor "'c:/program files (x86)/Notepad++/notepad++.exe' -multiInst -notabbar -nosession -noPlugin"</pre>				
Notepad++ (Win, 64-bit install)	<pre>\$ git configglobal core.editor "'c:/program files/Notepad++/notepad++.exe' -multiInst -notabbar -nosession -noPlugin"</pre>				
Kate (Linux)	\$ git configglobal core.editor "kate"				
Gedit (Linux)	\$ git configglobal core.editor "geditwaitnew-window"				
Scratch (Linux)	\$ git configglobal core.editor "scratch-text-editor"				
Emacs	\$ git configglobal core.editor "emacs"				
Vim	\$ git configglobal core.editor "vim"				
VS Code	\$ git configglobal core.editor "codewait"				

It is possible to reconfigure the text editor for Git whenever you want to change it.

Exiting Vim

Note that Vim is the default editor for many programs. If you haven't used Vim before and wish to exit a session without saving your changes, press Esc then type :q! and hit Return. If you want to save your changes and quit, press Esc then type :wq and hit Return.

The four commands we just ran above only need to be run once: the flag --global tells Git to use the settings for every project, in your user account, on this computer.

You can check your settings at any time:

```
$ git config --list
```

You can change your configuration as many times as you want: use the same commands to choose another editor or update your email address.

Proxy

In some networks you need to use a <u>proxy</u>. If this is the case, you may also need to tell Git about the proxy:

```
$ git config --global http.proxy proxy-url
$ git config --global https.proxy proxy-url
```

To disable the proxy, use

```
$ git config --global --unset http.proxy
$ git config --global --unset https.proxy
```

Git Help and Manual

Always remember that if you forget a git command, you can access the list of commands by using -help:

```
$ git config -h
$ git config --help
```

While viewing the manual, remember the : is a prompt waiting for commands and you can press Q to exit the manual.

Key Points

• Use git config with the --global option to configure a user name, email address, editor, and other preferences once per machine.

Licensed under <u>CC-BY 4.0</u> 2018–2020 by <u>The Carpentries</u> Licensed under <u>CC-BY 4.0</u> 2016–2018 by <u>Software Carpentry Foundation</u>