Why Do We Need This

You might be like me where I start work on the next feature to my project at night, but then go to bed before I actually finish. Which means that, when I start working the next day, there are uncommitted changes. This is fine because I haven't finished the new feature, but I can't remember exactly what I've done since my last commit. git status will tell us what files have been changed, but not what those changes actually were.

The git diff command is used to find out this information!

git diff

The $[\mbox{git diff}]$ command can be used to see changes that have been made but haven't been committed, yet.

```
$ git diff
```

To see <a>git diff in action, we need some uncommitted changes! In <a>index.html, let's reword the heading. Change the heading from "Expedition" to "Adventure". Save the file and run <a>[git diff on the Terminal.

You should see the following:

The Terminal application showing the output of the <code>git diff</code> command.

Wow, doesn't that look familiar! It's the same output that we say with [git log -p]! Wanna know a secret? [git log -p] uses [git diff] under the hood. So you've actually already learned how to read the output of [git diff]!

If you don't remember what the different sections are, check out the Annotated "git log -p" Output from the previous lesson.

 ${\it phase}$ These Changes Were Not Committed ${\it phase}$

The changes in this section were used to demo the output of $git\ diff$. They were not committed to the repository. If you'd like, you can definitely commit the changes to the repository, just know that your $git\ log\ will look\ slightly\ different from\ mine\ because\ it\ includes\ this\ extra\ commit.$

Git Diff Recap

To recap, the <code>git diff</code> command is used to see changes that have been made but haven't been committed, yet:

```
$ git diff
```

This command displays:

- the files that have been modified
- the location of the lines that have been added/removed
- the actual changes that have been made

Further Research

• git diff from the Git Docs