

## Version Control with Git

(index.html)

## Creating a Repository

- Learning Objectives
  - Create a local Git repository.

Once Git is configured, we can start using it. Let's create a directory for our work and then move into that directory:

```
$ mkdir planets
```

\$ cd planets

Then we tell Git to make planets a repository (reference.html#repository)—a place where Git can store versions of our files:

```
$ git init
```

If we use 1s to show the directory's contents, it appears that nothing has changed:

```
$ 1s
```

But if we add the -a flag to show everything, we can see that Git has created a hidden directory within planets called .git:

```
$ 1s -a
```

```
. .. .git
```

Git stores information about the project in this special sub-directory. If we ever delete it, we will lose the project's history.

We can check that everything is set up correctly by asking Git to tell us the status of our project:

```
$ git status
```

```
# On branch master
# Initial commit
nothing to commit (create/copy files and use "git add" to track)
```

## Places to Create Git Repositories

Dracula starts a new project, moons, related to his planets project. Despite Wolfman's concerns, he enters the following sequence of commands to create one Git repository inside another:

```
cd
              # return to home directory
mkdir planets # make a new directory planets
cd planets # go into planets
git init
              # make the planets directory a Git repository
mkdir moons  # make a sub-directory planets/moons
cd moons
             # go into planets/moons
git init
              # make the moons sub-directory a Git repository
```

Why is it a bad idea to do this? How can Dracula "undo" his last git init?

Software Carpentry (http://software-carpentry.org) Source (https://github.com/swcarpentry/git-novice)

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