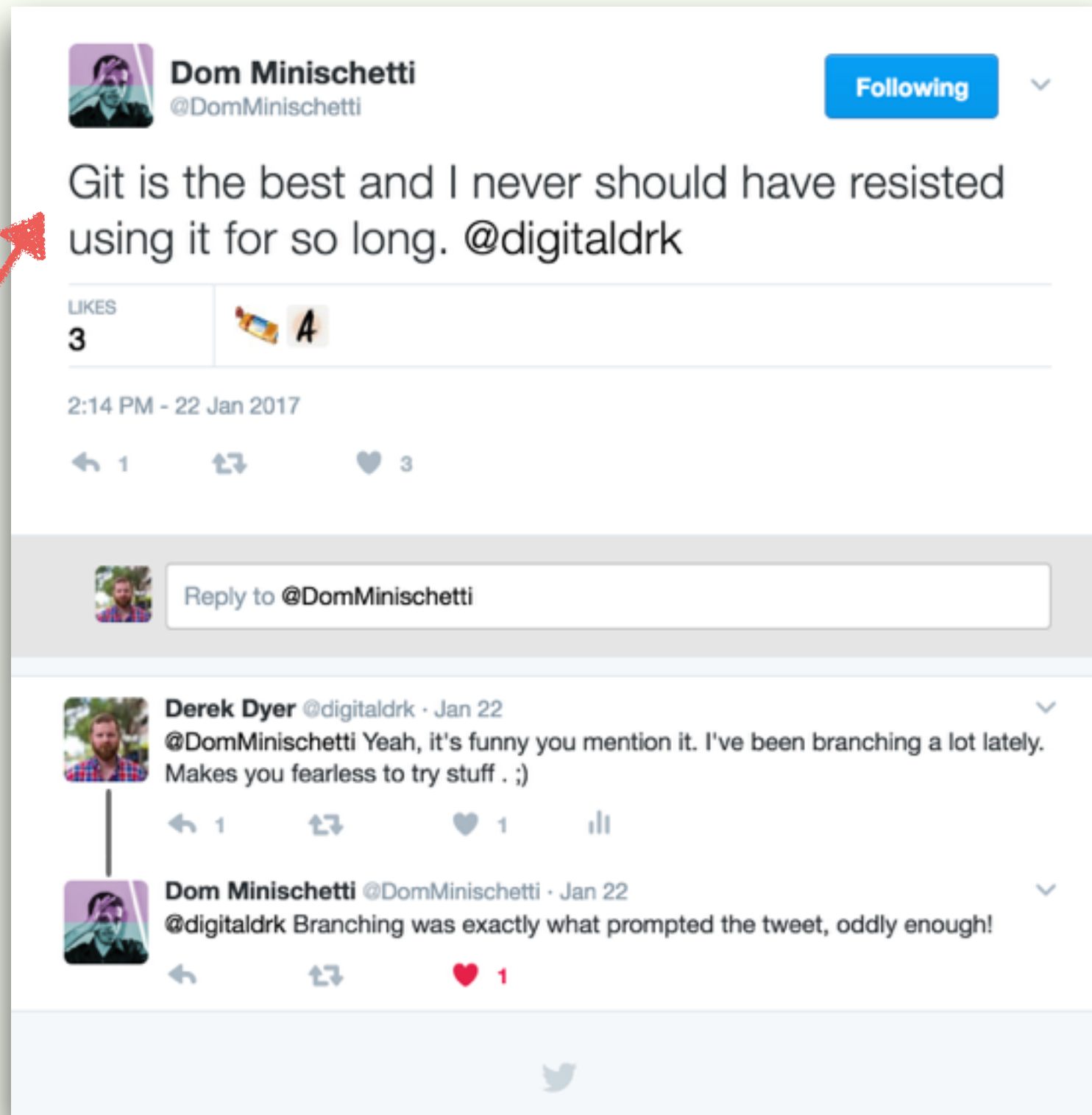




https://github.com/digitaldrk/git_talk_tampa_bay_startup_week

Goal For This Talk

A tweet/DM/
text/slack/high
five like this
from
you one day



Git VS GitHub

- **Git:** A revision control program, a tool to manage your source code history compartmentalized into “Repositories”. Tracks changes.
- **GitHub:** A public (by default) hosting service / website for Git Repositories.

Installation

So after some discussion with colleagues, it was discovered that “officially”, GitHub now prefers you use the HTTPS protocol instead of SSH (SSH being the protocol I had documented in my talk).

With that said, if you don't have Git/Github set up, you could download GitHub Desktop which is an app made by GitHub. Once you have the app running, you can login to your GitHub account in the app and it will connect to your GitHub account. This app will install the command line version of git shell (terminal) as well for Windows users.

Link to download GitHub desktop app: <https://desktop.github.com/>

Link to article about saving your PW in Git:

<https://help.github.com/articles/caching-your-github-password-in-git/>

Vocabulary

- Repository (“Repo”): A place where the history of your work is stored. It often lives in a .git subdirectory of your working copy - a copy of the most recent state of the files you're working on.
- Branch: Represents an independent line of development. Branches serve as an abstraction for the edit / stage / commit process
- Fetch: Download objects and refs from another repository
- Merge: Join two or more development histories together
- Pull: Fetch from and integrate with a local branch

Anatomy of a Git Command (really any command)

Command

Name

Option

:git: commit :-m: "Adds stuff to the thing.":

- **Command:** split into an array of strings named arguments
- **Option:** modifies the command, changing the way it performs
- **Argument:** Argument 0 is (normally) the command name

Basic Git Workflow

Edit File > `Git add` > `Git commit -m "message"`

'Informational' Commands

(these commands don't do stuff')

- `git status (favorite)`: Shows you the status of files in the index versus the working directory
- `git branch (favorite)`: lists your branches and tells you what branch you're on
- `git remote`: Shows all the remote versions of your repository.
- `git log`: Shows a listing of commits on a branch including the corresponding details
- `git diff`: Show changes between commits, commit and working tree, etc

'Do Stuff' Commands

୦_୦

- `git init`: Initializes a git repository
- `git clone`: Clones a repository
- `git add .` OR `file_name.rb`: “Stages” changes you have saved
- `git commit -m “message about commit”`: Takes all staged commits and records them to the repository
- `git fetch`: Download objects (code) and refs (commits) from another repository (note: still need to `merge`)
- `git pull`: Downloads just like `fetch` but ALSO `merges`

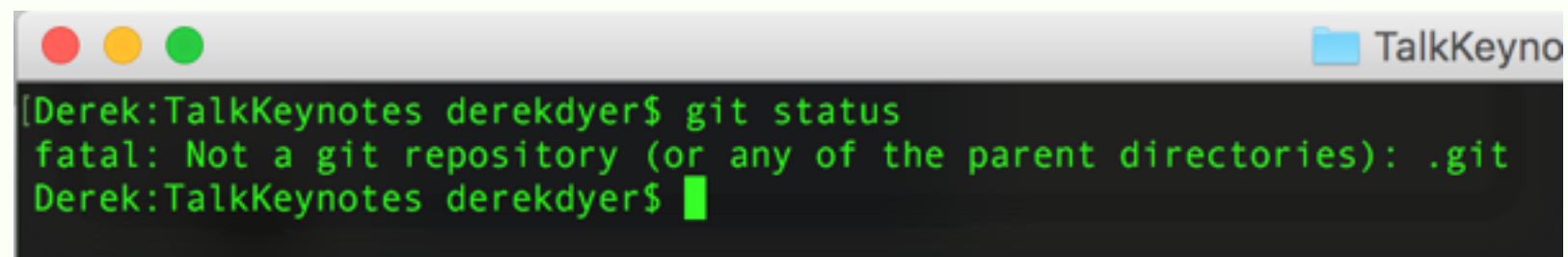
Let's Practice

Navigate to your project directory:

```
cd ~/projects/your-project-directory
```

Status Check!

`git status`

A screenshot of a macOS-style terminal window. The title bar at the top has three colored window control buttons (red, yellow, green) on the left and a folder icon labeled 'TalkKeyno' on the right. The terminal content is as follows:

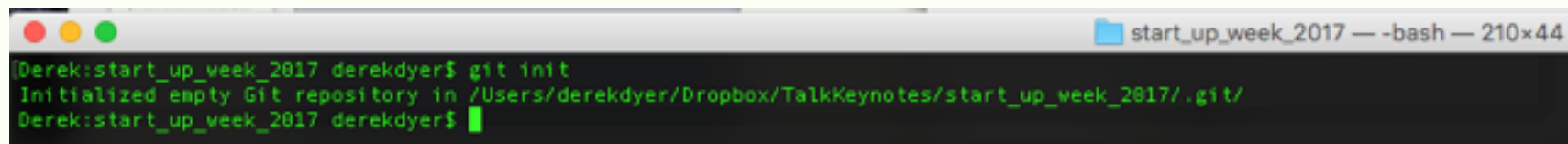
```
[Derek:TalkKeynotes derekdye$ git status  
fatal: Not a git repository (or any of the parent directories): .git  
Derek:TalkKeynotes derekdye$ █
```

The text is green on a black background. A green cursor is visible at the end of the last line.

This means we haven't turned this folder/directory into a git repository yet

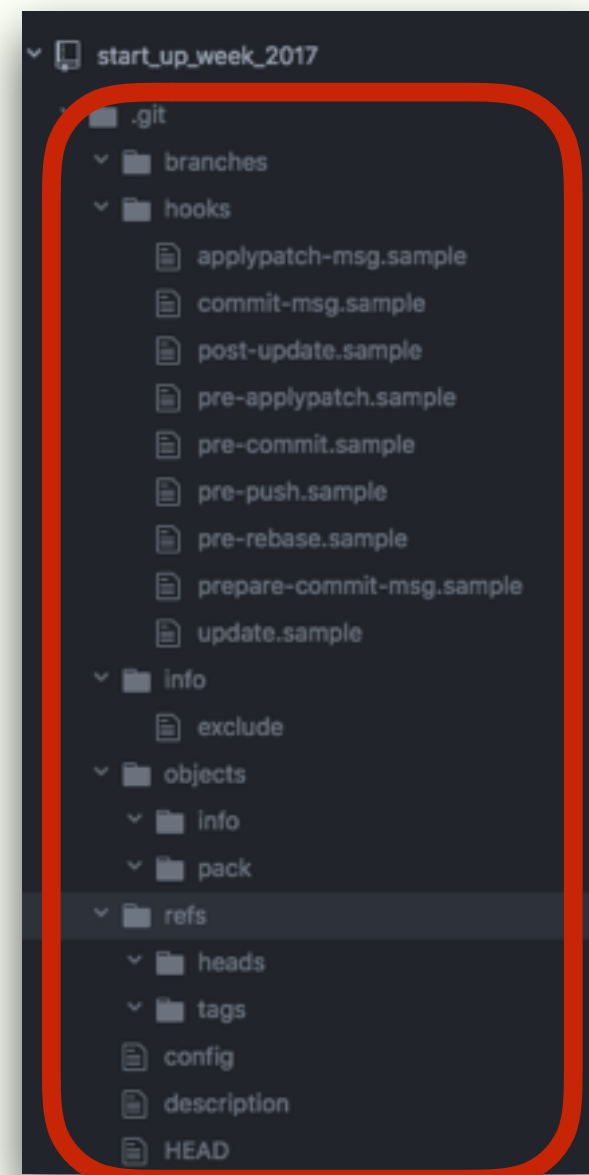
Initialize The Repo In Your Project Folder

```
git init
```

A terminal window titled 'start_up_week_2017 — -bash — 210x44'. The prompt is 'Derek:start_up_week_2017 derekdyer\$'. The command 'git init' has been entered and executed. The output is 'Initialized empty Git repository in /Users/derekdyer/Dropbox/TalkKeynotes/start_up_week_2017/.git/'. The prompt is now 'Derek:start_up_week_2017 derekdyer\$' with a green cursor.

```
Derek:start_up_week_2017 derekdyer$ git init
Initialized empty Git repository in /Users/derekdyer/Dropbox/TalkKeynotes/start_up_week_2017/.git/
Derek:start_up_week_2017 derekdyer$
```

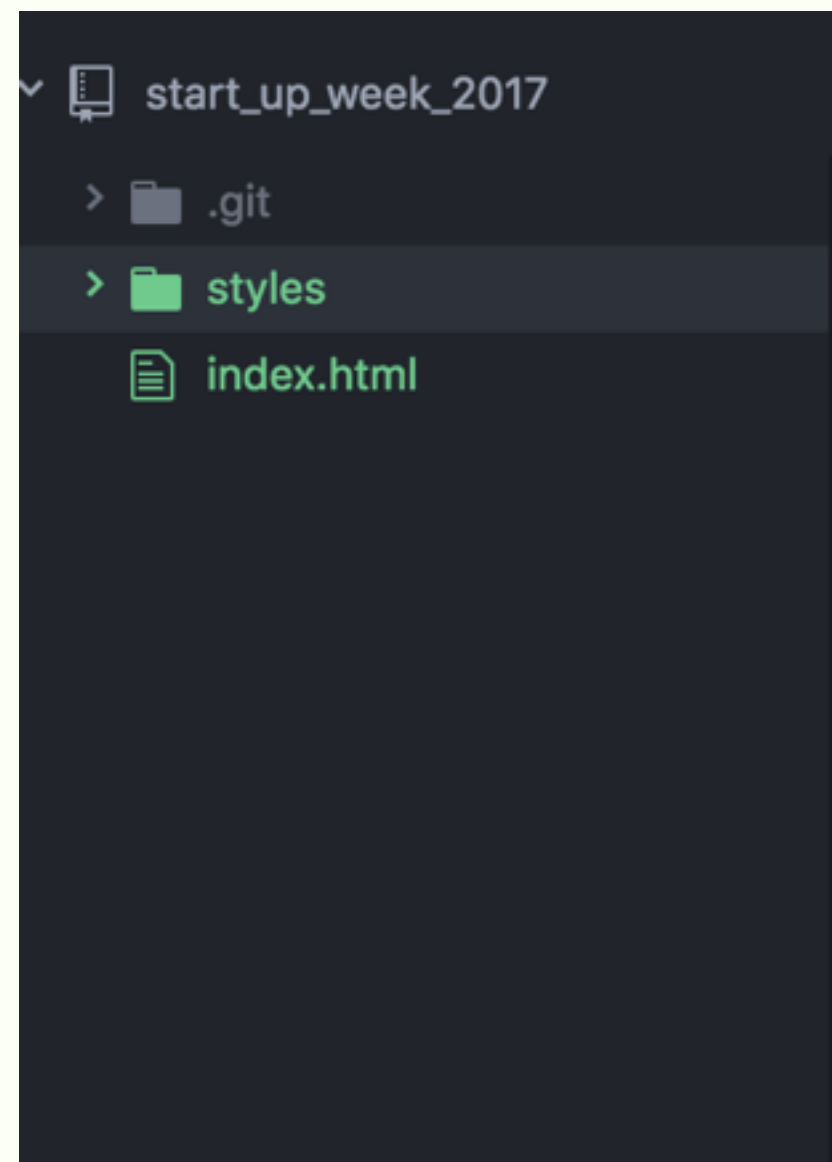
You May Notice the
New Git Directory
in Your Project
Depending on What
Text Editor You Use



Add Files and Code To Your Project

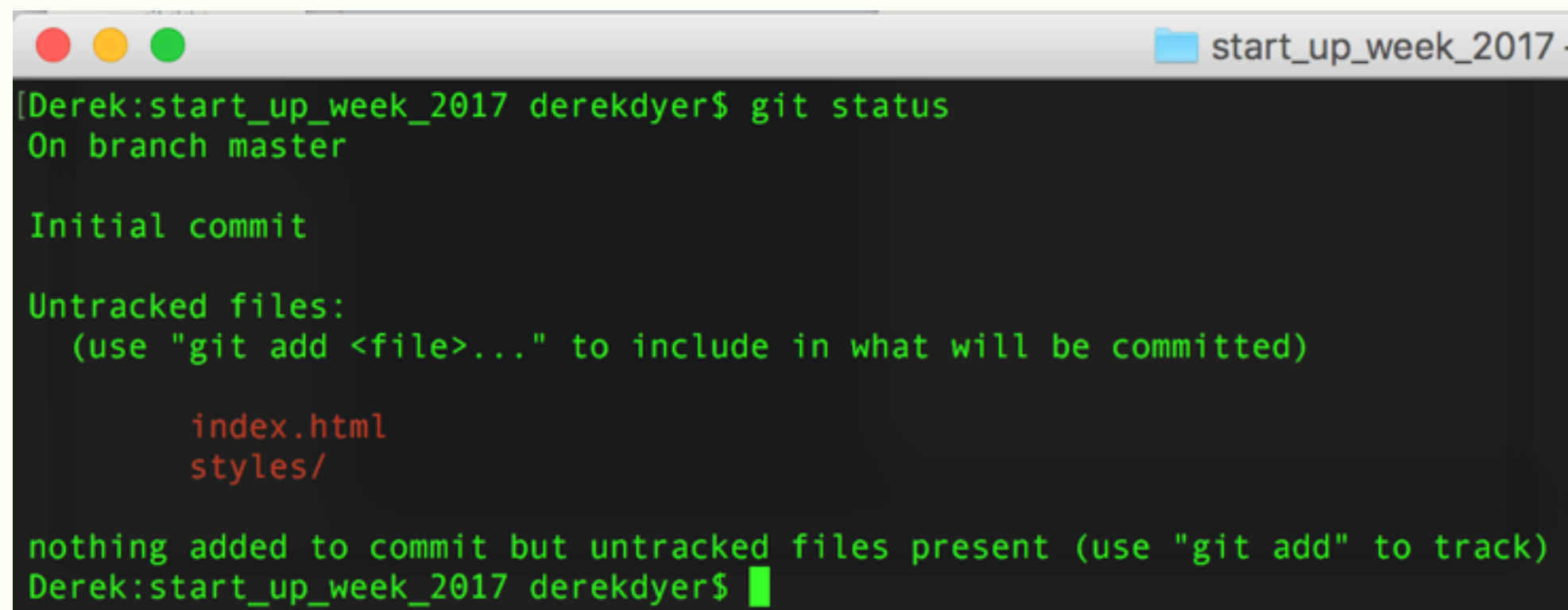
I added a file and folder. Atom, (the text editor I'm using) made the un-staged additions green.

Pretty cool 😎



Status Check!

`git status`

A terminal window with a dark background and green text. The window title bar shows three colored circles (red, yellow, green) on the left and a folder icon with the text 'start_up_week_2017' on the right. The terminal content shows the command 'git status' being executed, followed by the output: 'On branch master', 'Initial commit', 'Untracked files:', '(use "git add <file>..." to include in what will be committed)', 'index.html', 'styles/', and 'nothing added to commit but untracked files present (use "git add" to track)'. The prompt 'Derek:start_up_week_2017 derekdye\$' is followed by a green cursor.

```
[Derek:start_up_week_2017 derekdye$ git status
On branch master

Initial commit

Untracked files:
  (use "git add <file>..." to include in what will be committed)

        index.html
        styles/

nothing added to commit but untracked files present (use "git add" to track)
Derek:start_up_week_2017 derekdye$
```

Add Changes

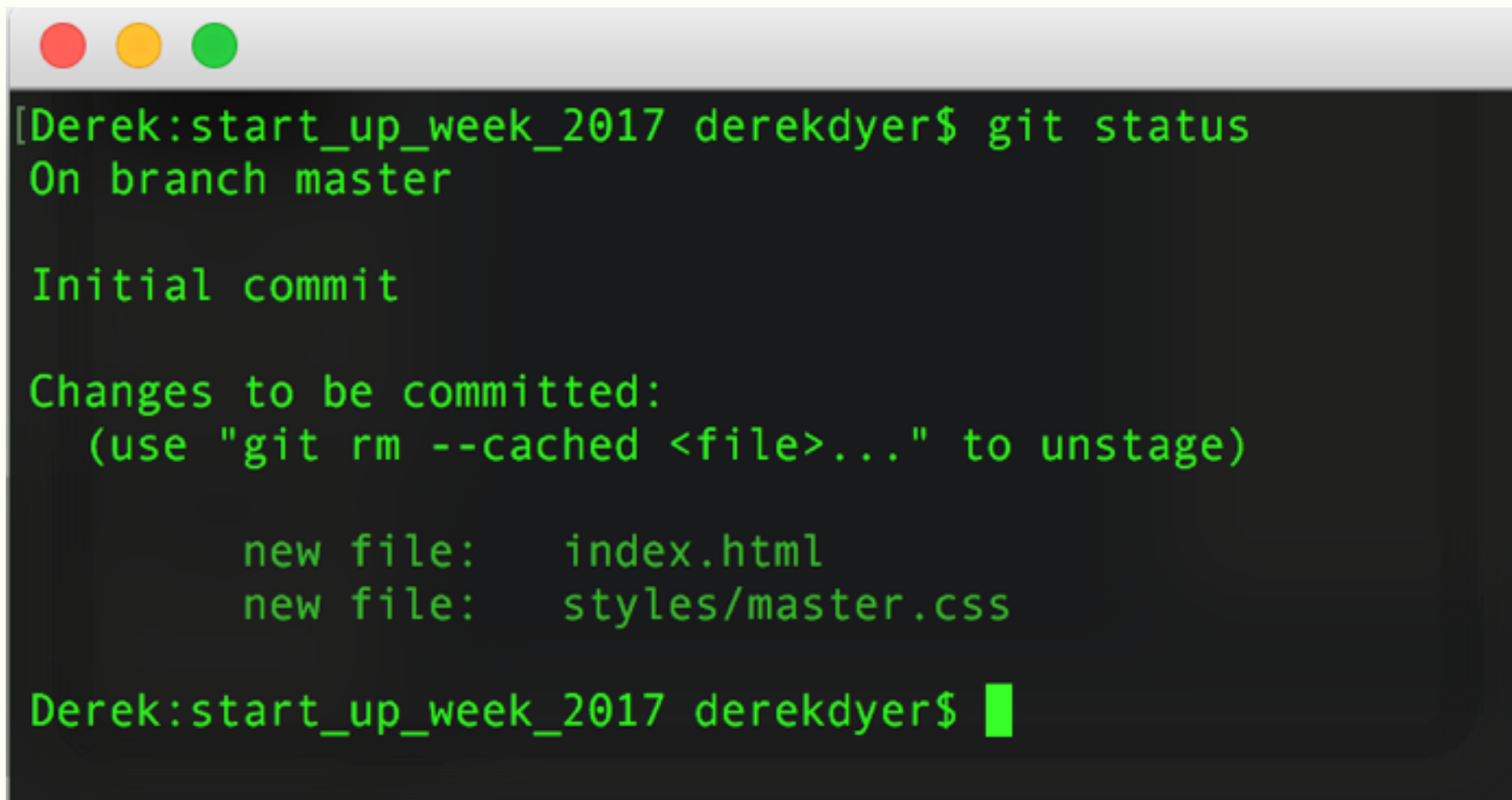
```
git add .
```

OR

```
git add file_name.html
```

Status Check!

```
git status
```

A terminal window with a dark background and green text. The window has a title bar with three colored circles (red, yellow, green) on the left. The text inside the terminal shows the command 'git status' being executed, followed by the output: 'On branch master', 'Initial commit', 'Changes to be committed:', '(use "git rm --cached <file>..." to unstage)', 'new file: index.html', and 'new file: styles/master.css'. The prompt 'Derek:start_up_week_2017 derekdyer\$' is shown at the bottom with a green cursor bar.

```
[Derek:start_up_week_2017 derekdyer$ git status
On branch master

Initial commit

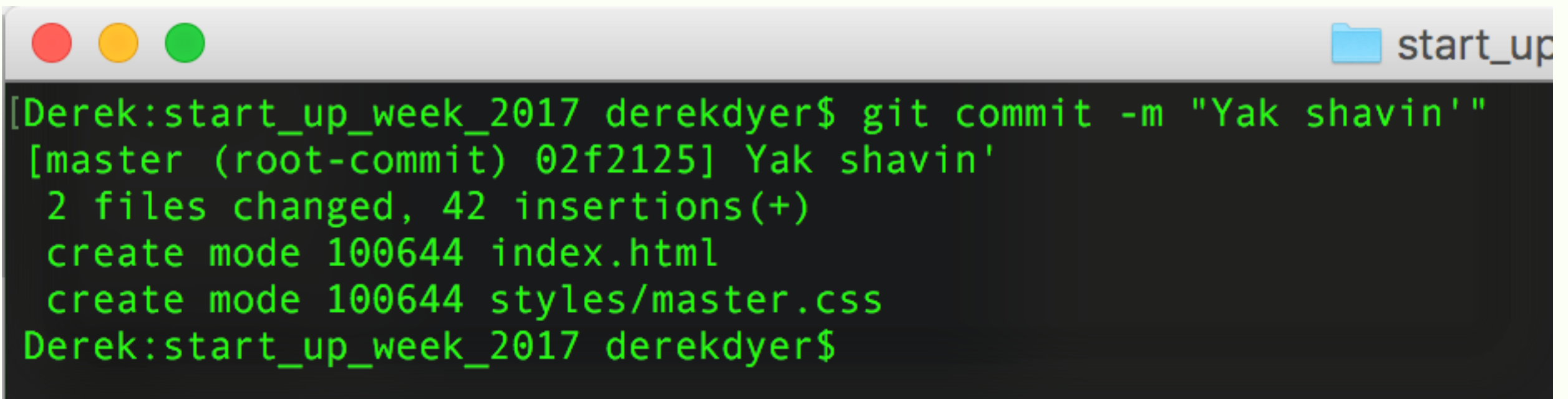
Changes to be committed:
  (use "git rm --cached <file>..." to unstage)

    new file:   index.html
    new file:   styles/master.css

Derek:start_up_week_2017 derekdyer$
```


Commit

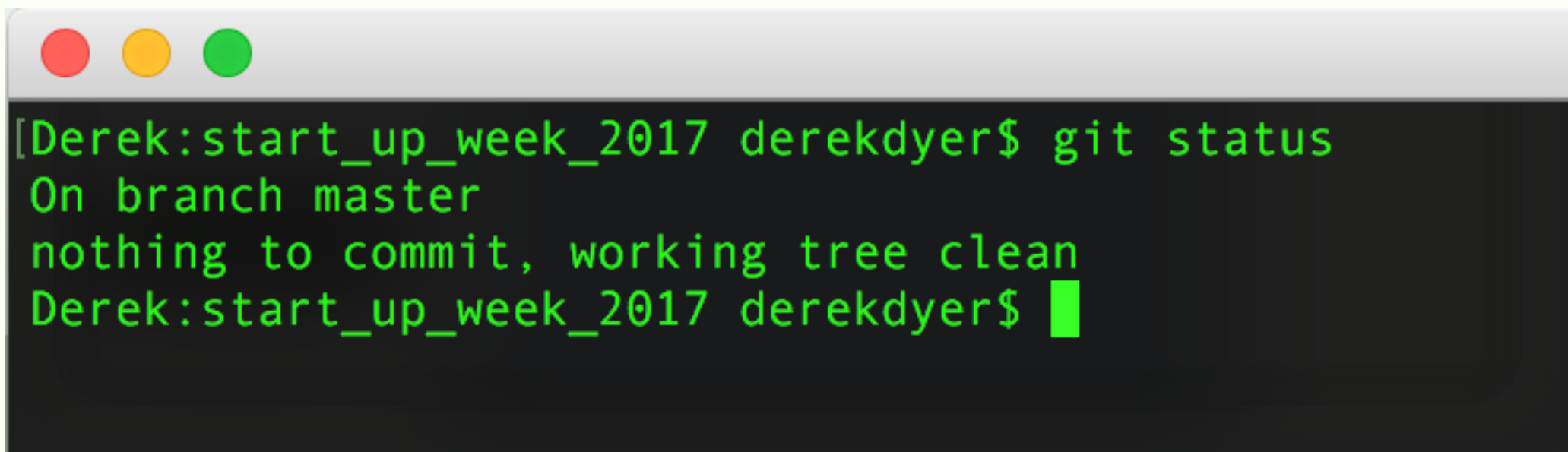
```
git commit -m "Yak shavin'"
```

A terminal window with a light gray title bar containing three colored window control buttons (red, yellow, green) on the left and a folder icon with the text 'start_up' on the right. The terminal content is displayed in green text on a dark background. It shows a user named 'derekdyer' in the directory 'start_up_week_2017' executing the command 'git commit -m "Yak shavin"'. The output shows the commit was successful on the 'master' branch, with a commit hash of '02f2125'. It also shows that 2 files were changed with 42 insertions: 'index.html' and 'styles/master.css', both created with mode 100644.

```
[Derek:start_up_week_2017 derekdyer$ git commit -m "Yak shavin'"
[master (root-commit) 02f2125] Yak shavin'
 2 files changed, 42 insertions(+)
 create mode 100644 index.html
 create mode 100644 styles/master.css
Derek:start_up_week_2017 derekdyer$
```

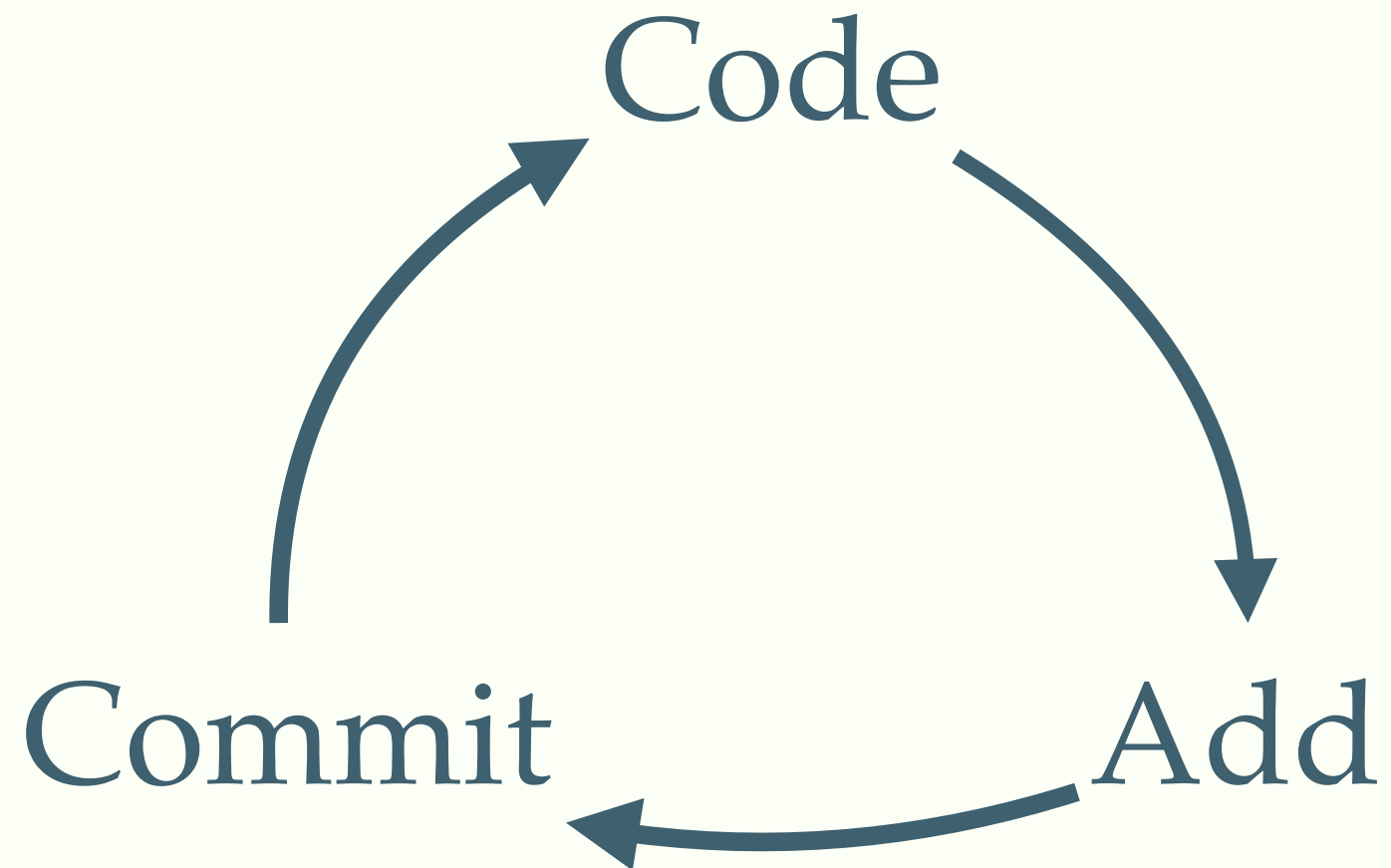
Status Check!

```
git status
```

A terminal window with a light gray title bar and three colored window control buttons (red, yellow, green) on the left. The terminal has a dark background with green text. It shows the command 'git status' being executed, followed by the output: 'On branch master', 'nothing to commit, working tree clean', and a new prompt line.

```
[Derek:start_up_week_2017 derekdye$ git status  
On branch master  
nothing to commit, working tree clean  
Derek:start_up_week_2017 derekdye$ █
```

Repeat



Create a Repo in GitHub

The image shows a GitHub profile page for Derek Dyer. The profile includes a profile picture, name, username, location (Tampa, FL), and website (http://digitalderek.com/). It also lists organizations (Code for Tampa Bay, B, and a logo with three red triangles) and shows 499 contributions in the last year. A dropdown menu is open in the top right corner, displaying options: "New repository", "Import repository", "New gist", and "New organization". The "New repository" option is highlighted with a red circle. The main content area shows a list of popular repositories: "congo" (Amazon clone, Ruby, 1 star, 1 fork), "bootstrap_practice" (Bootstrap training progress from lynda, HTML, 1 star), "assignments" (TIY Homework), "old_koans" (Forked from tiy-tpa-rails-q2-2015/koans, Ruby Koans, Ruby), "Blackjack" (My black jack game, Ruby), and "dice" (Forked from tiy-tpa-rails-q2-2015/dice, Assignment 2-1, Ruby).

Search GitHub

Pull requests Issues Gist

New repository

Import repository

New gist

New organization

Overview Repositories 37 Stars 5 Followers 16

Popular repositories

congo
Amazon clone
Ruby ★ 1 🍴 1

bootstrap_practice
Bootstrap training progress from lynda
HTML ★ 1

assignments
TIY Homework

old_koans
Forked from tiy-tpa-rails-q2-2015/koans
Ruby Koans
Ruby

Blackjack
My black jack game.
Ruby

dice
Forked from tiy-tpa-rails-q2-2015/dice
Assignment 2-1
Ruby

Derek Dyer
digitaldrk
Add a bio

Tampa, FL
http://digitalderek.com/

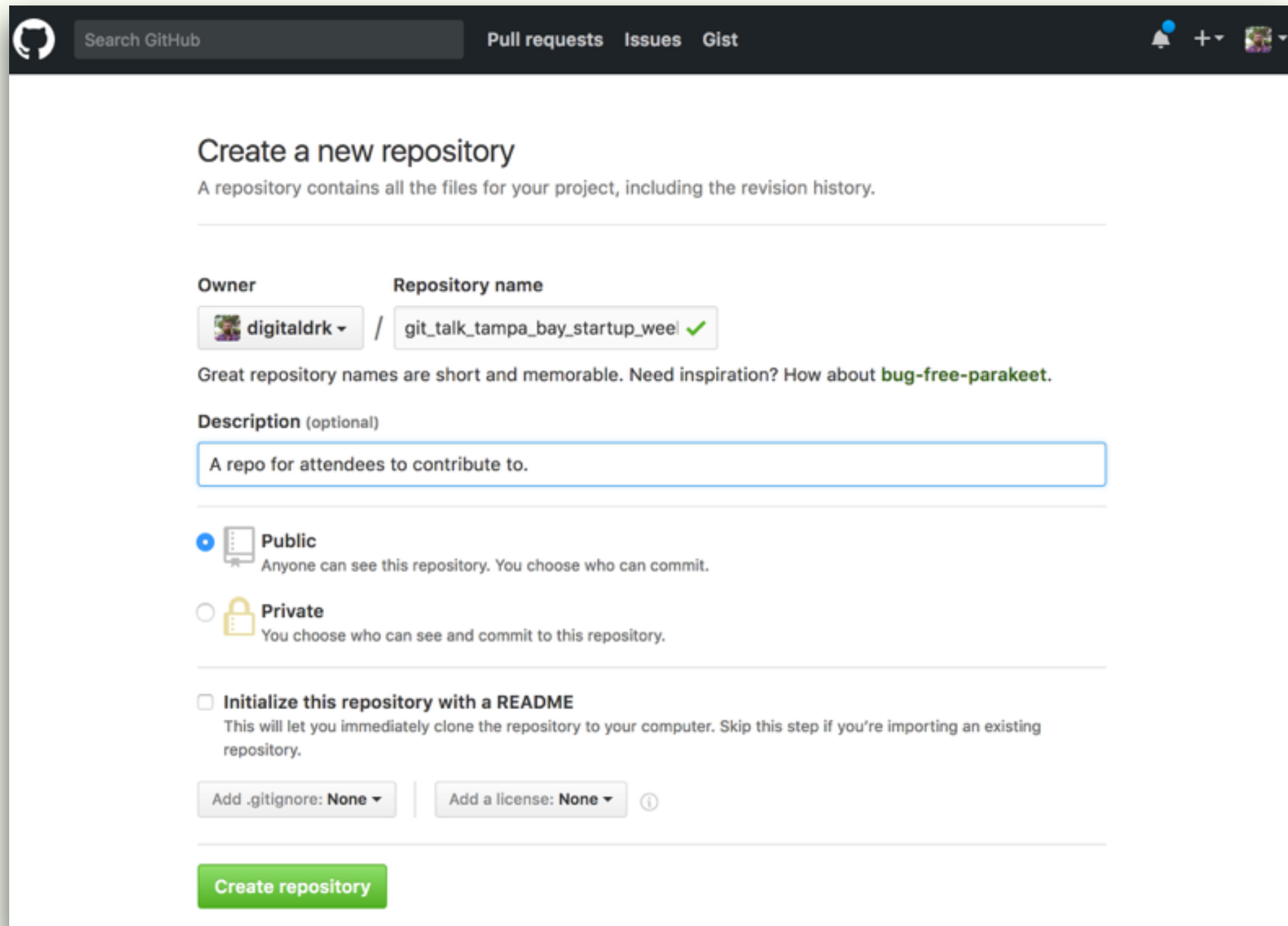
Organizations

CODE FOR TAMPA BAY B

499 contributions in the last year

Contribution settings

Name Repo and Add Description



The screenshot shows the GitHub interface for creating a new repository. At the top is a dark navigation bar with the GitHub logo, a search bar, and links for 'Pull requests', 'Issues', and 'Gist'. On the right of the bar are notification and user profile icons. The main content area is titled 'Create a new repository' with a subtitle explaining that a repository contains all files for a project. Below this, there are two input fields: 'Owner' (set to 'digitaldrk') and 'Repository name' (set to 'git_talk_tampa_bay_startup_week' with a green checkmark). A tip suggests using short, memorable names like 'bug-free-parakeet'. A 'Description (optional)' text box contains the text 'A repo for attendees to contribute to.'. There are two radio button options for visibility: 'Public' (selected) and 'Private'. At the bottom, there is an unchecked checkbox for 'Initialize this repository with a README'. Two dropdown menus for '.gitignore' and 'license' are both set to 'None'. A green 'Create repository' button is at the bottom.

Search GitHub

Pull requests Issues Gist

Create a new repository

A repository contains all the files for your project, including the revision history.

Owner: digitaldrk / Repository name: git_talk_tampa_bay_startup_week ✓

Great repository names are short and memorable. Need inspiration? How about **bug-free-parakeet**.

Description (optional): A repo for attendees to contribute to.

☒ **Public**
Anyone can see this repository. You choose who can commit.

☐ **Private**
You choose who can see and commit to this repository.

☐ **Initialize this repository with a README**
This will let you immediately clone the repository to your computer. Skip this step if you're importing an existing repository.

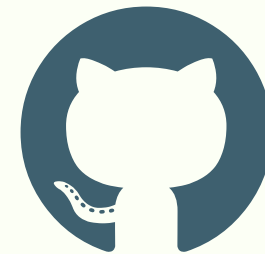
Add .gitignore: None | Add a license: None ⓘ

Create repository

Let's review where we are real quick



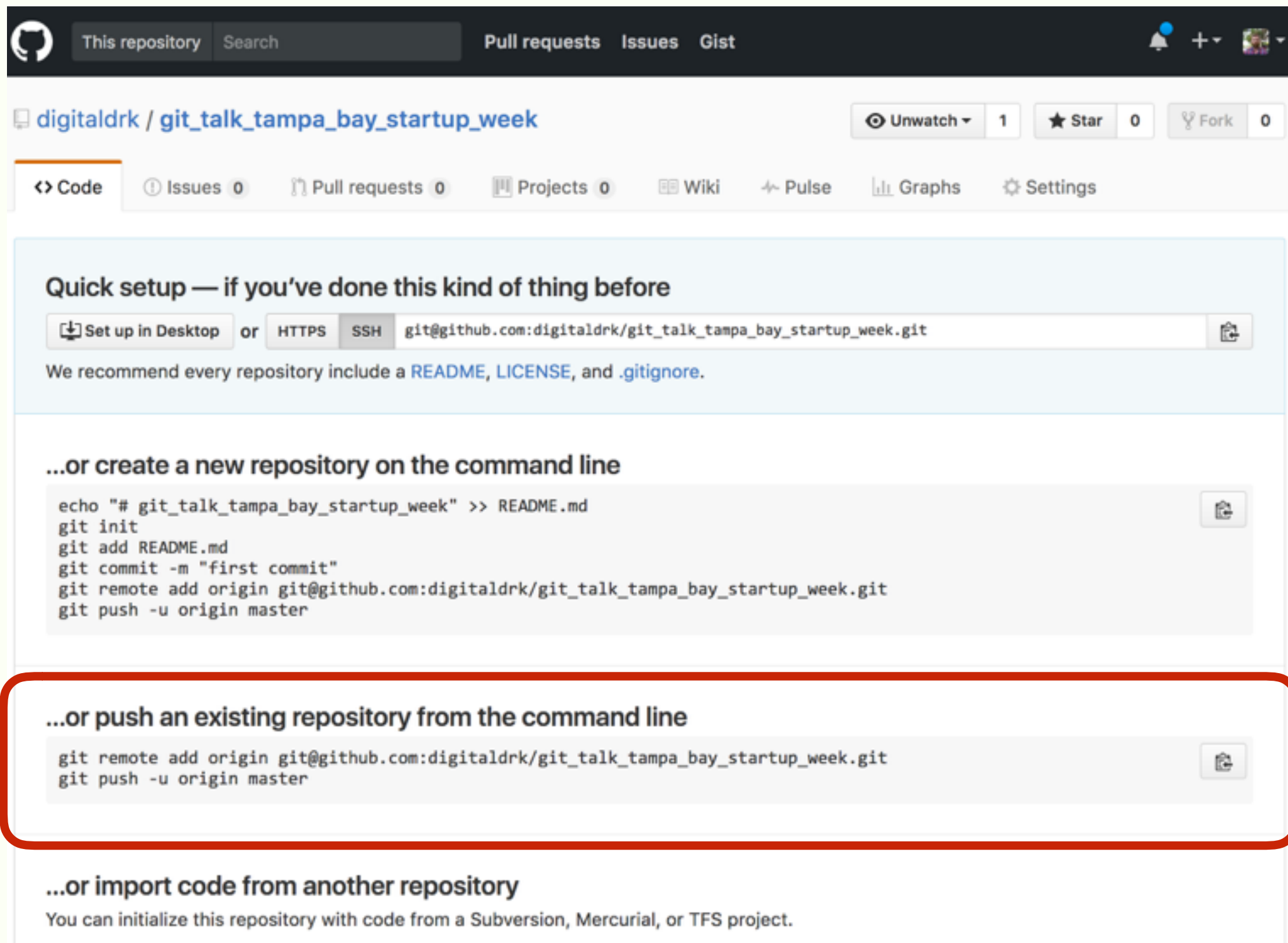
You have a repository of
code with some commits
in your computer



You have created an
EMPTY 'remote'
repository in GitHub

These are totally separate. Next we will connect them.

Copy This Code



This repository Search Pull requests Issues Gist

digitaldrk / git_talk_tampa_bay_startup_week Unwatch 1 Star 0 Fork 0

Code Issues 0 Pull requests 0 Projects 0 Wiki Pulse Graphs Settings

Quick setup — if you've done this kind of thing before

Set up in Desktop or HTTPS SSH git@github.com:digitaldrk/git_talk_tampa_bay_startup_week.git

We recommend every repository include a [README](#), [LICENSE](#), and [.gitignore](#).

...or create a new repository on the command line

```
echo "# git_talk_tampa_bay_startup_week" >> README.md
git init
git add README.md
git commit -m "first commit"
git remote add origin git@github.com:digitaldrk/git_talk_tampa_bay_startup_week.git
git push -u origin master
```

...or push an existing repository from the command line

```
git remote add origin git@github.com:digitaldrk/git_talk_tampa_bay_startup_week.git
git push -u origin master
```

...or import code from another repository

You can initialize this repository with code from a Subversion, Mercurial, or TFS project.

What Does the Command You Copied Mean?

```
git remote add origin git@github.com:digitaldrk/git_talk_tampa_bay_startup_week.git  
git push -u origin master
```

```
git remote add origin
```

The command `git remote add origin` creates a new remote called `origin` located at `git@github.com:peter/first_app.git`. Once you do this, in your push commands, you can push to `origin` instead of typing out the whole URL.

```
git push -u origin master
```

This is a command that says "push the commits in the local branch named `master` to the remote named `origin`". Once this is executed, all the stuff that you last synchronised with `origin` will be sent to the remote repository and other people will be able to see them there.


The `' - u '`


after pushing your local branch with `-u` option, this local branch will be automatically linked with remote branch, and you can use `git pull` without arguments. It's the same as `—set-upstream`, It's used to set `origin` as the upstream remote in your git config.

While in your projects folder, Paste It Into Terminal, Press Enter, and Then Refresh the GitHub Page

```
Derek:start_up_week_2017 derekdyer$ git remote add origin git@github.com:digitaldrk/git_talk_tampa_bay_startup_week.git
[Derek:start_up_week_2017 derekdyer$ git push -u origin master
Counting objects: 5, done.
Delta compression using up to 8 threads.
Compressing objects: 100% (3/3), done.
Writing objects: 100% (5/5), 1.23 KiB | 0 bytes/s, done.
Total 5 (delta 0), reused 0 (delta 0)
To github.com:digitaldrk/git_talk_tampa_bay_startup_week.git
 * [new branch]      master -> master
Branch master set up to track remote branch master from origin.
Derek:start_up_week_2017 derekdyer$ █
```

Success!

 This repository Search Pull requests Issues Gist

 digitaldrk / git_talk_tampa_bay_startup_week

Unwatch 1 Star 0 Fork 0

<> Code

Issues 0

Pull requests 0

Projects 0

Wiki

Pulse

Graphs

Settings

A repo for attendees to contribute to.

Edit

New

Add topics

1 commit

1 branch

0 releases

1 contributor

Branch: master


New pull request

Create new file

Upload files

Find file

Clone or download

 digitaldrk Yak shavin' Latest commit 02f2125 6 hours ago

styles

Yak shavin'

6 hours ago

index.html

Yak shavin'

6 hours ago

Help people interested in this repository understand your project by adding a README.

Add a README

Cool Links

- Cool Command-Line site
 - <http://explainshell.com/>
- Git site
 - <https://git-scm.com/>
- Downloads
 - <https://git-scm.com/downloads>
- Learn Git in your browser
 - <https://try.github.io/levels/1/challenges/1>

Thank You!



I appreciate you spending your valuable time with me and I hope you found this talk encouraging and helpful