Host a Site on GitHub

For free

Demo and Slides by Alanna Risse
December 6, 2018

@alannarisse

What are we doing today?

Today we are hosting a static website
(html, css, javascript, and images)
on GitHub.com

How are we doing it?

GitHub uses **git**, an open source version control software. We can use git software on our local machines (laptops, etc) to save our files into a local git repository of files and then push (upload) those files to GitHub. Then (if we want) we can point a domain name at it so it has a pretty url like myfancywebsite.com instead of alannarisse.github.io.

I'll explain more as we go. First....

Shhhhh. No questions right now.
We have to do this part fast.
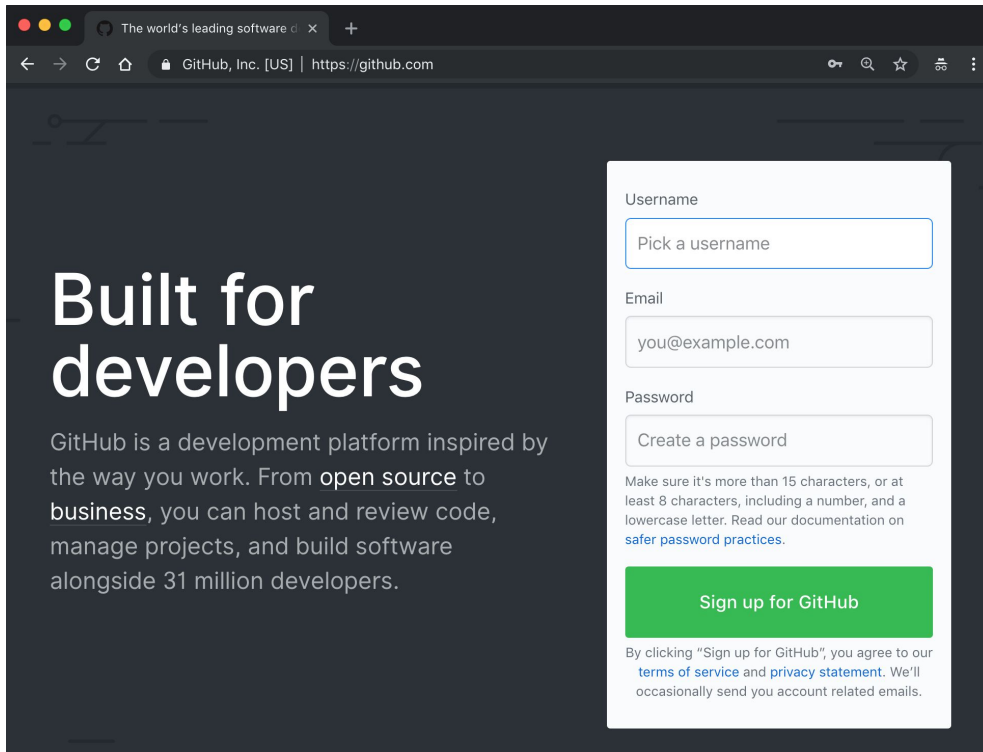
First things first.

1. Create a new GitHub Account.
2. Create a repository called **your-github-username.github.io**
3. Change settings for HTTPS

___

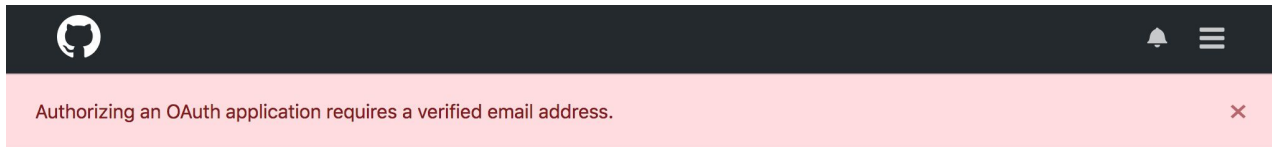# Create a GitHub Account on github.com

Go here:

http://github.com/join

Create a username. You'll need to have access to the email you use during sign up to verify it.

Create a GitHub Account on github.com

Go verify your email address

Create a New Repository
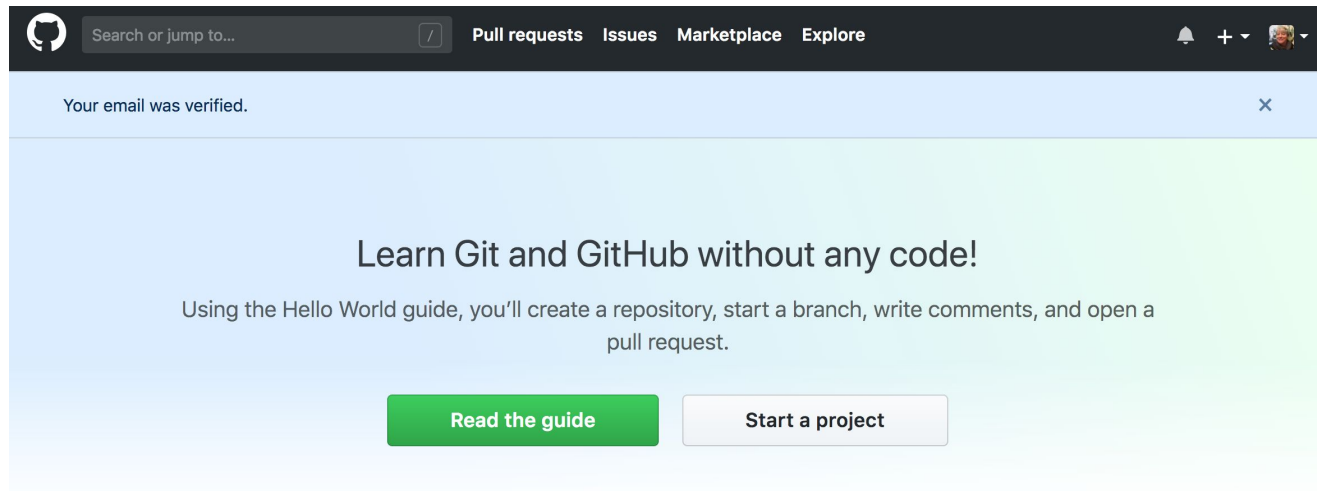
Click the green "New Repository" button.

Create a New Repository

Create a new repository

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

Owner   **Repository name**

[alannacodes ▾] / [alannacodes.github.io   ✓]

Great repository names are short and memorable. Need inspiration? How about **refactored-dollop**.

Description (optional)

[   ]

◉ 📖 **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**]

IMPORTANT! It must be named:

your-github-username.github.io

(except with your actual username)

Make it public.

DO NOT initialize with a README

Change GitHub Pages Settings

Go to the Settings page of your repository

Change GitHub Pages Settings

GitHub Pages

GitHub Pages is designed to host your personal, organization, or project pages from a GitHub repository.

✔ Your site is published at http://alannarisse.tech/

Source
Your GitHub Pages site is currently being built from the `master` branch. Learn more.

[master branch ▾] [Save]

User pages must be built from the `master` branch.

Theme Chooser
Select a theme to publish your site with a Jekyll theme. Learn more.

[Choose a theme]

Custom domain
Custom domains allow you to serve your site from a domain other than `alannarisse.github.io`. Learn more.

[alannarisse.tech] [Save]

☑ **Enforce HTTPS** ✔
HTTPS provides a layer of encryption that prevents others from snooping on or tampering with traffic to your site. When HTTPS is enforced, your site will only be served over HTTPS. Learn more.

In the settings for your new repository, scroll down to the GitHub Pages section.

Add your custom domain if you've purchased one.

Select the Enforce HTTPS checkbox.

What are we using?

A **GitHub account** (free) to host our files

SourceTree software to easily use Git without having to use any command line code.

Our local version of a **website** with html, css, images, and javascript

A **custom domain name**. I'm using alannarisse.tech which I bought from NameCheap.com

How it works

Step 1
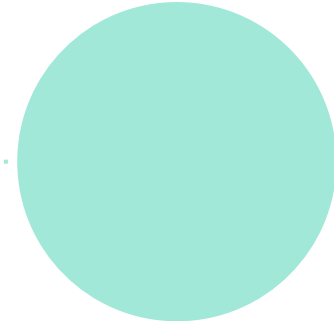Create an account on github and add a repository
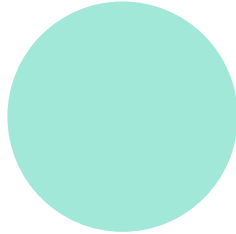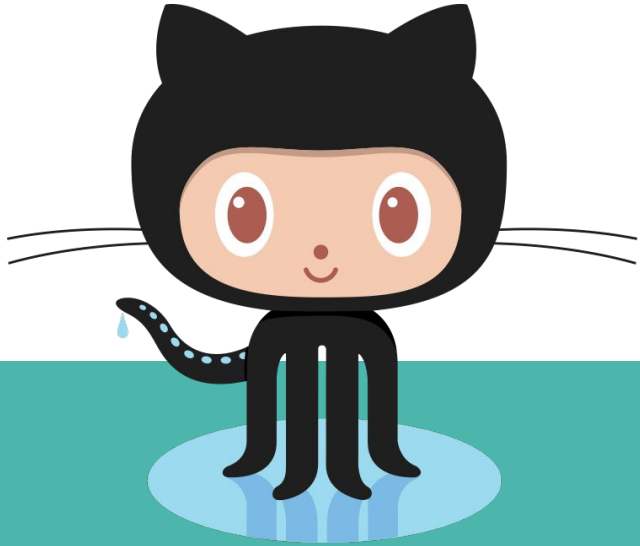
Step 2
Download SourceTree and connect your local files to github

Step 3
Connect your custom domain to your github repository

What are Git, GitHub.com, and SourceTree?

Git is source control software. It keeps versions of files.

SourceTree is an application that lets us check files in without having to write unix commands.

GitHub is cloud-based storage that allows us to store our files remotely. Kinda like the FTP server we've been using.

Let's get Source Tree working

Source Tree allows us to check things into git and up to GitHub without having to type any unix commands in the terminal. It's a GUI app that lets us push buttons to achieve the same things.
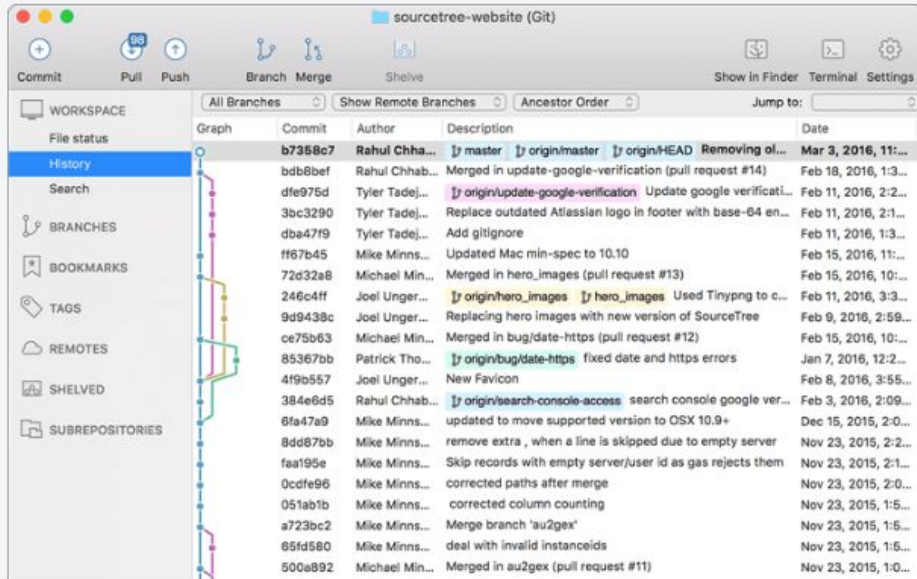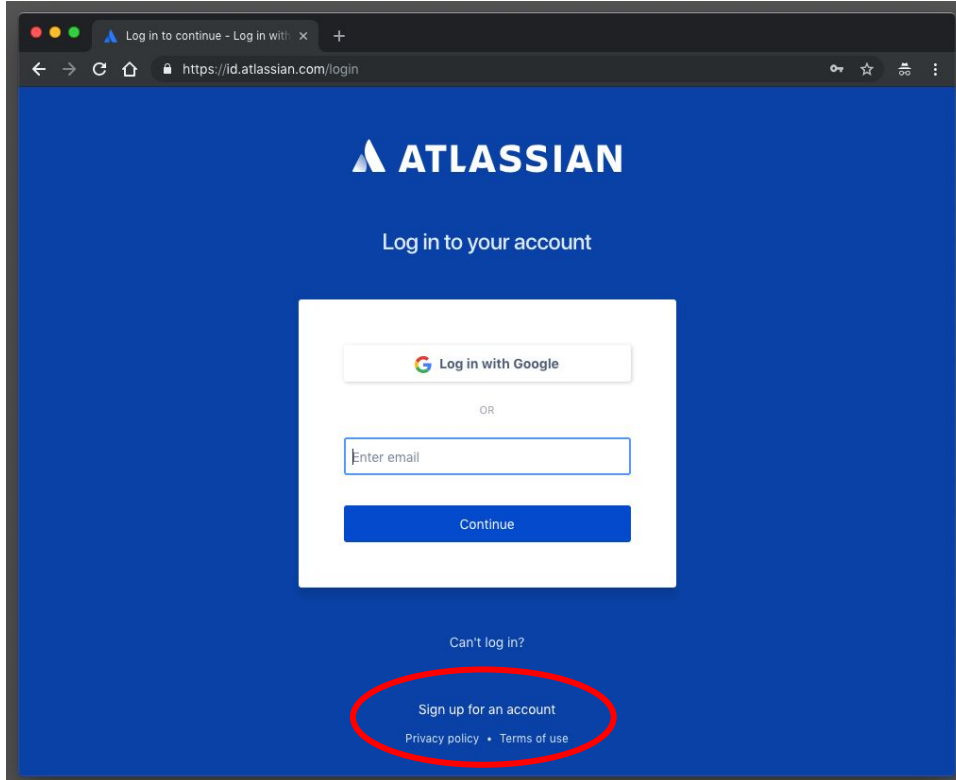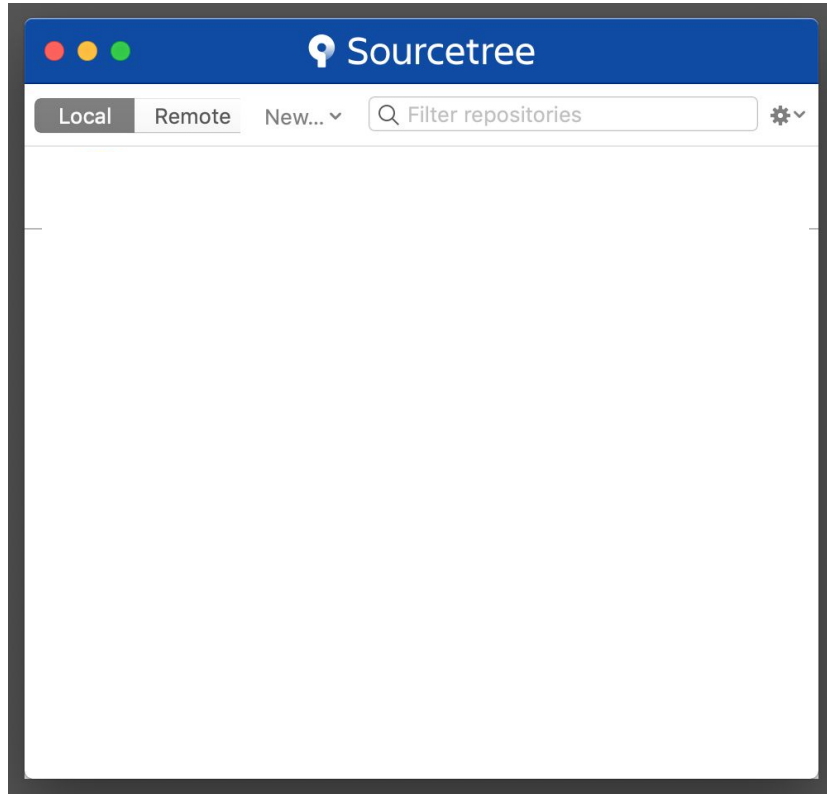
Download Sourcetree - sourcetreeapp.com

Download Sourcetree - sourcetreeapp.com
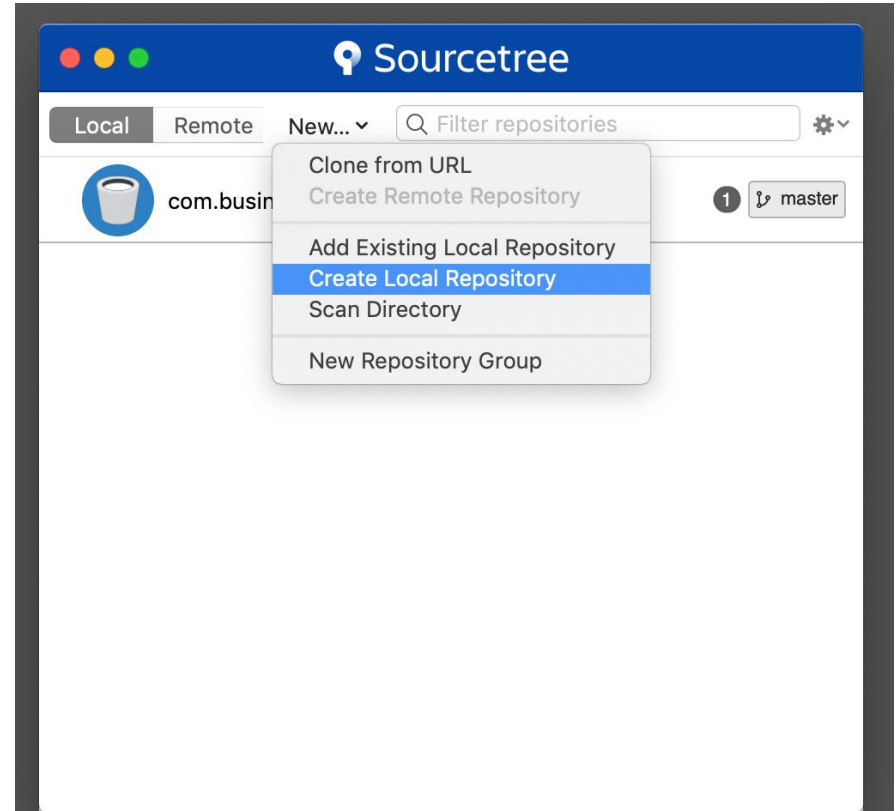

You'll need to create
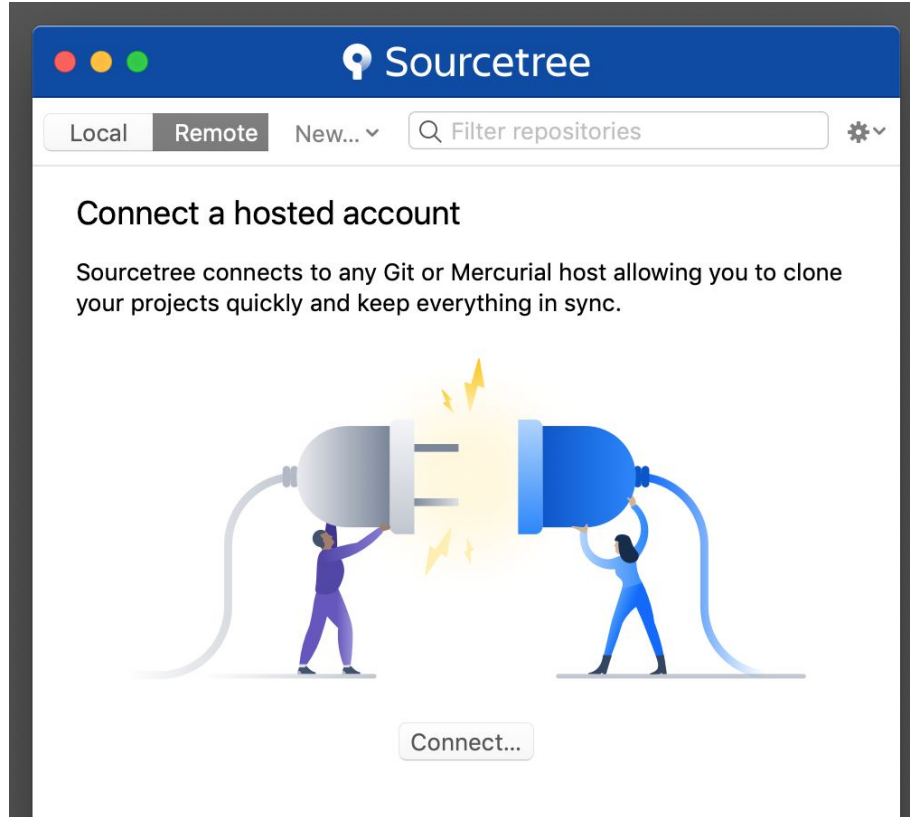
Let's add our Local Git setup

You should see this window when you start Sourcetree.
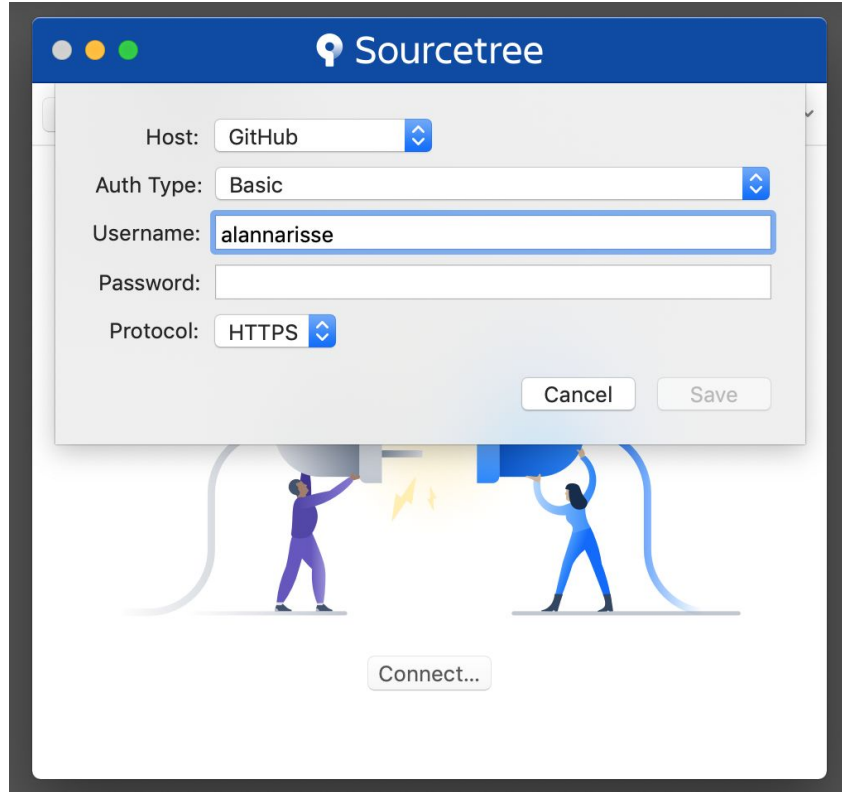
Create a Local Repository

Click on the New... menu and choose "Create Local Repository"

Click on the Remote tab to connect to Github

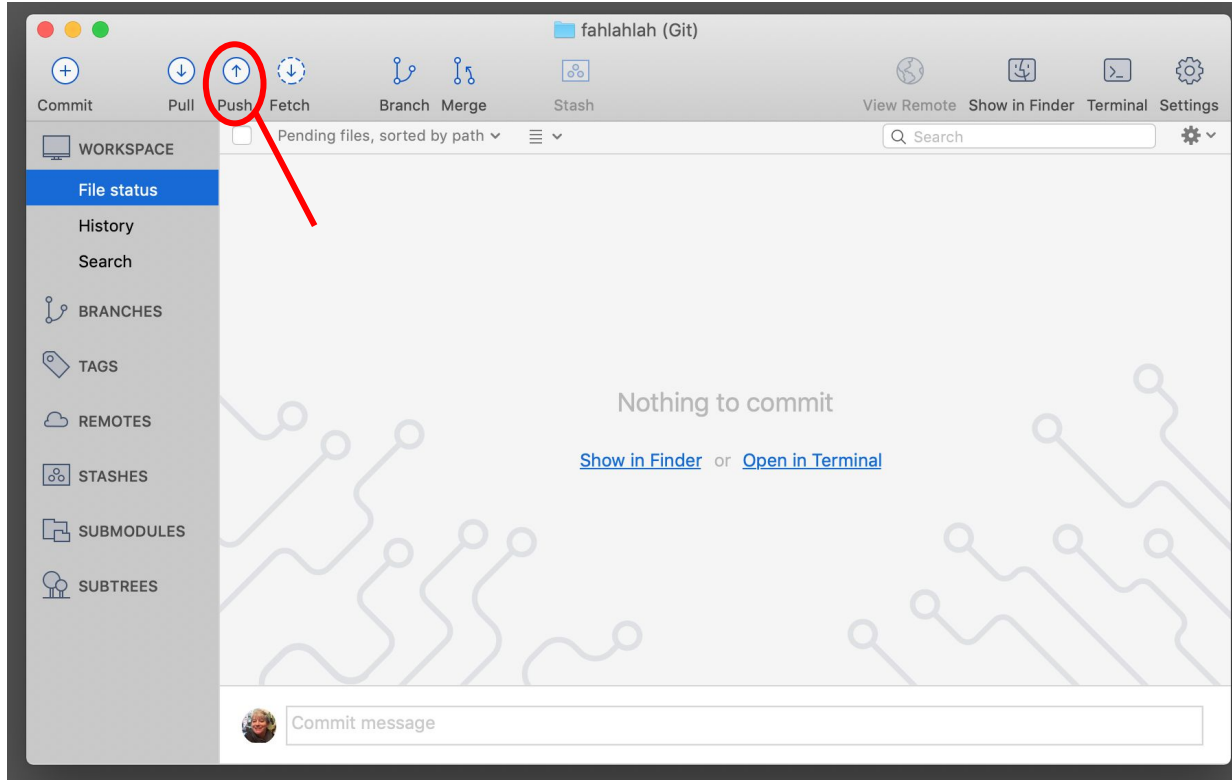# Choose These settings and log in to GitHub

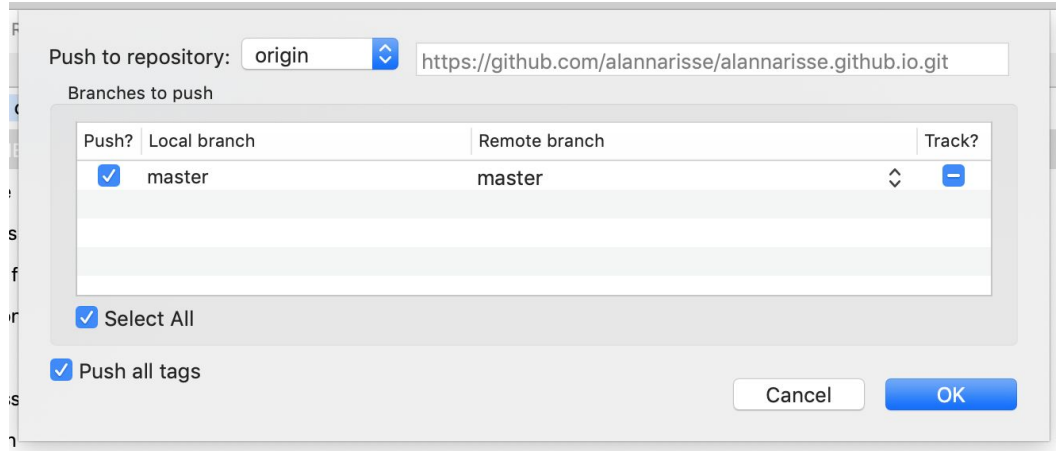Host: GitHub

Auth Type: Basic

Username: Your Username

Password: Your Password

Protocol: HTTPS

Let's push your files up to GitHub
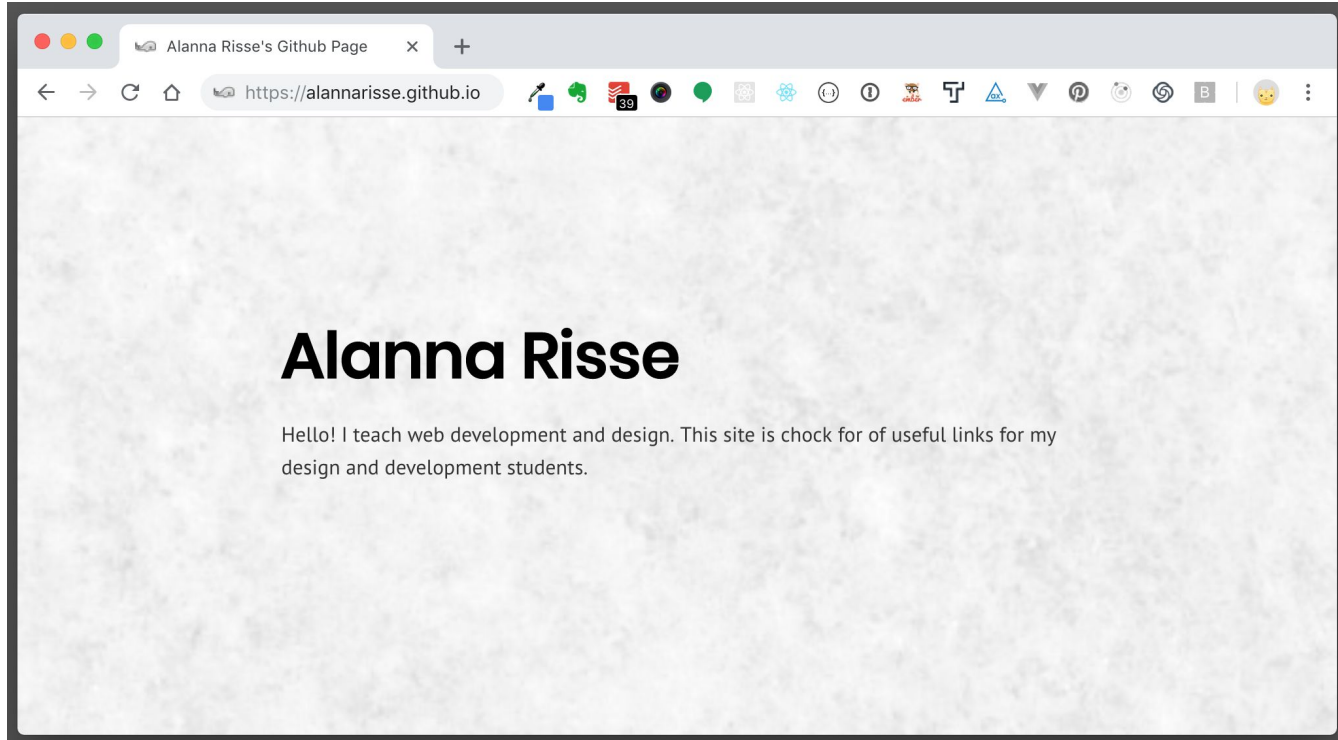
Push to repository: origin

You should see this dialog box. Click ok.

Let's try it out

Go to your-user-name.github.io

To go yourusername.github.io

Yay! It worked!

Let's get your domain name hooked up

In NameCheap (or wherever you bought your domain name)

We need to add some **A records** and a **CNAME record**

Add CNAME and A Records

		alannarisse.tech				

	Domain	Products	Sharing & Transfer	Advanced DNS

▶ HOST RECORDS   ❓

🔘 Actions ▼	🔻 Filters ▼	Search 🔍

	Type	Host	Value		TTL	
☐	A Record	@	185.199.108.153		Automatic	🗑
☐	A Record	@	185.199.109.153		Automatic	🗑
☐	A Record	@	185.199.110.153		Automatic	🗑
☐	A Record	@	185.199.111.153		Automatic	🗑
☐	CNAME Record	www	alannarisse.github.io.		Automatic	🗑

➕ **ADD NEW RECORD**   🔼 SHOW LESS

Add 4 A Records. These should all have a host of @

- 185.199.108.153
- 185.199.109.153
- 185.199.110.153
- 185.199.111.153

Add CNAME record with host of www YOUR-GITHUB-USERNAME.github.io

Get rid of the URL Redirect Record and the CNAME Record for parkingpage.namecheap.com

What the What? CNAME and A Records

What's a CNAME Record?

A Canonical Name or **CNAME** record is a type of DNS (Domain Name Server) record that maps an alias name to a true or canonical domain name. **CNAME** records are typically used to map a subdomain such as www or mail to the domain hosting that subdomain's content. In our case we are mapping your custom url to YOUR-GITHUB-USERNAME.github.io
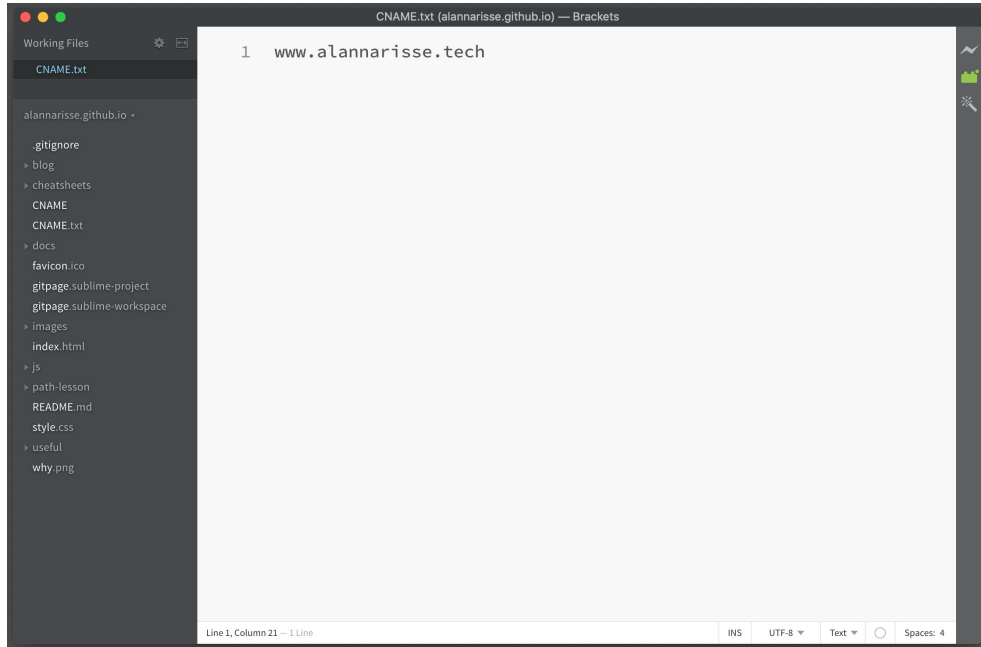
What's an A Record?

An A (Address) record is another type of DNS record that links a domain name to an IP(Internet protocol) address. Everything on the web can be accessed by a unique IP address.
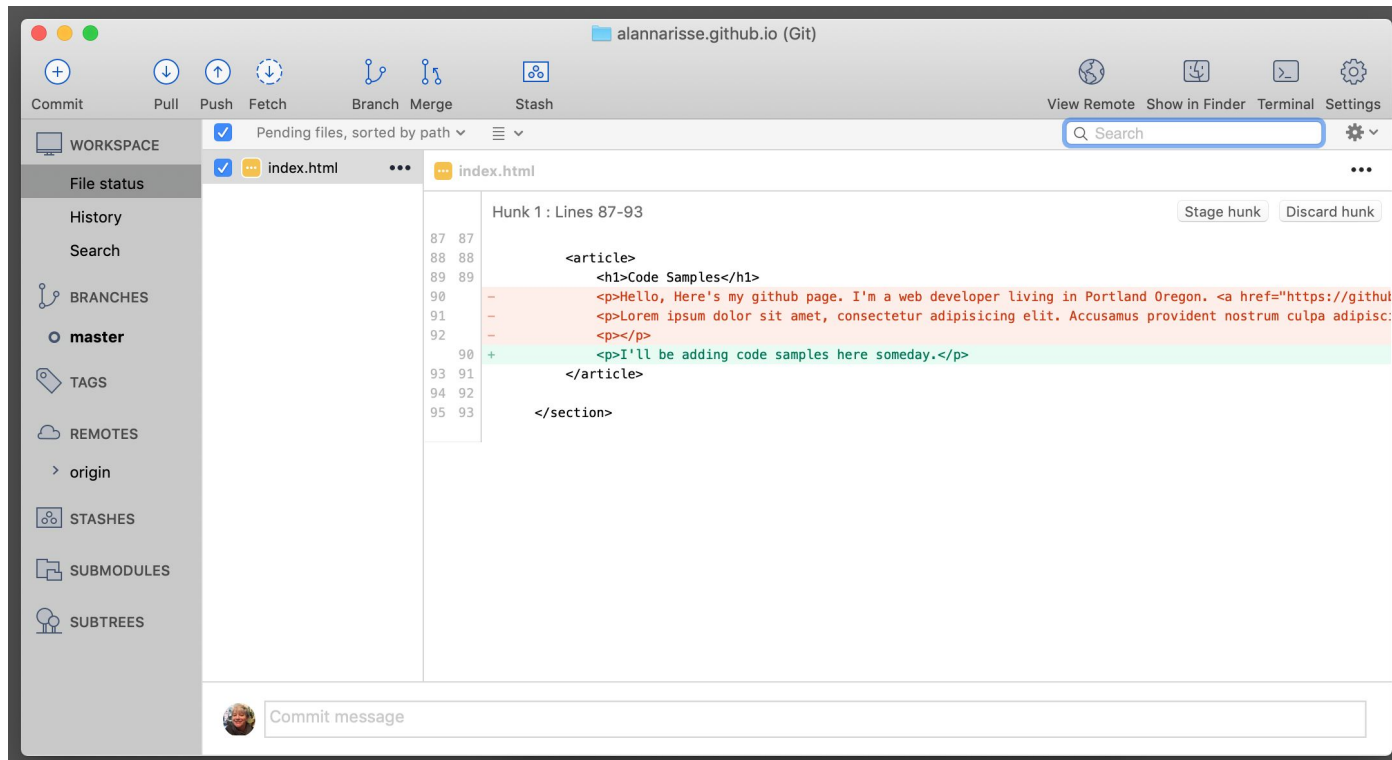
Add a file to your project

We're going to add a file to our project so GitHub knows what our custom url is.

Create a file called CNAME.txt in a text editor
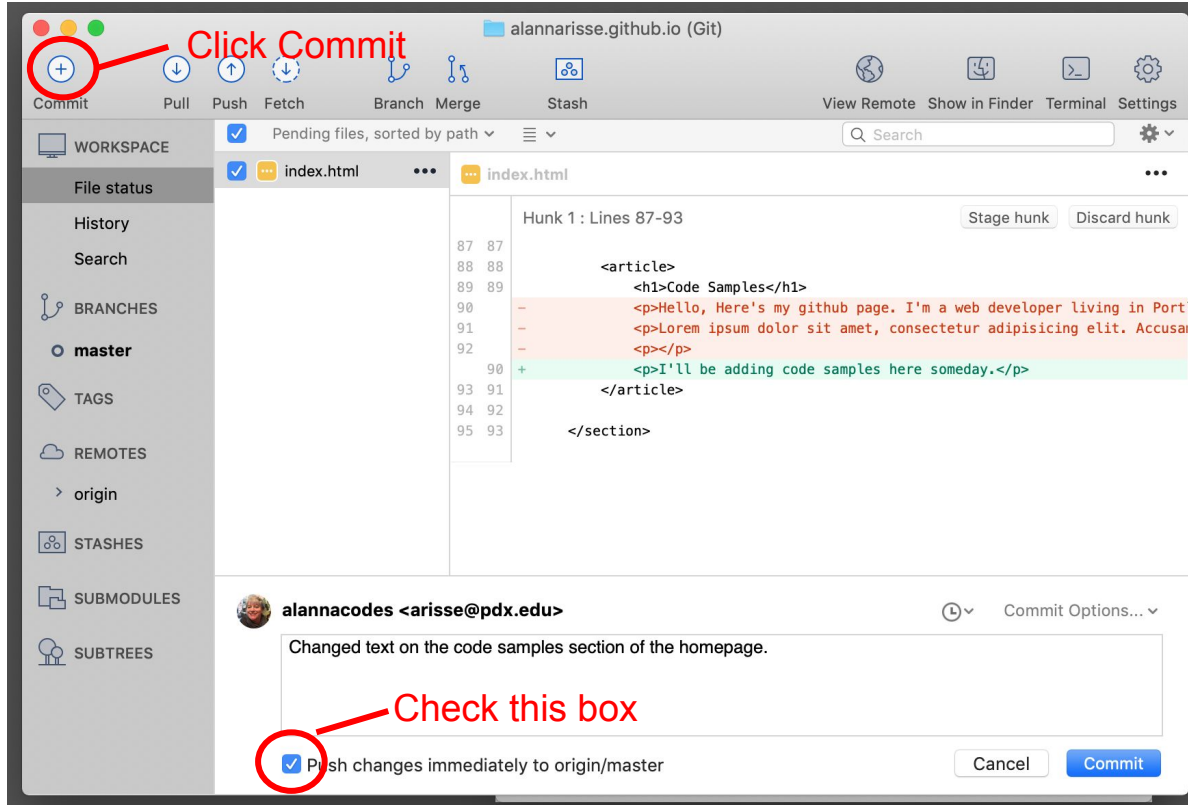

Add your custom domain name and save the file.

You'll see some changes in Source Tree

Commit your file

Click the Commit button on the top left.

Check the box on the bottom: Push changes immediately to origin/master.

Your custom domain should now work

Sometimes it takes a couple hours. If you aren't seeing it by the end of the day today, email me and I'll help you troubleshoot. arisse@pdx.edu

What else?

Let's revisit how to make changes and publish them.

1. Open your files in Brackets (or your text editor of choice
2. Make your changes
3. Go back to Source Tree to see your changes. You may have to click on the settings icon, sometimes it's hard to get it to refresh quickly.
4. Click on the commit button
5. Write a commit message and click the automatically push to origin/master

Thank you!

Resources

- [Github for poets](#)