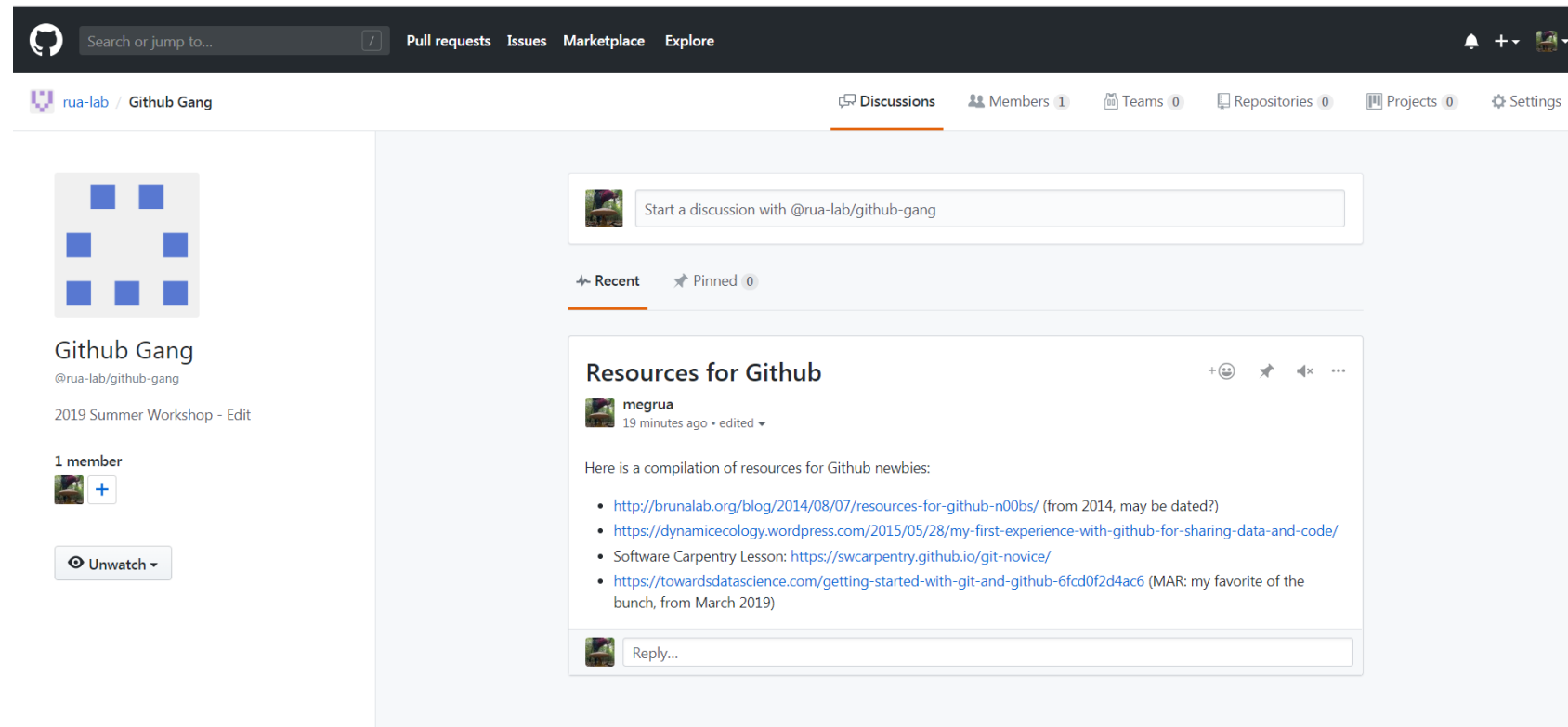


Intro to Github



- **Git** – version control tech
- **GitHub** - social code-hosting platform that's currently used more than any other
 - Others - Bitbucket



The screenshot shows the GitHub interface for the repository 'rua-lab / Github Gang'. The top navigation bar includes a search bar, 'Pull requests', 'Issues', 'Marketplace', and 'Explore'. The repository page features a repository card with the name 'Github Gang', the path '@rua-lab/github-gang', and a description '2019 Summer Workshop - Edit'. It shows '1 member' and an 'Unwatch' button. The main content area displays a discussion titled 'Resources for Github' by user 'megrua', posted 19 minutes ago. The discussion includes a list of links for GitHub newcomers: <http://brunolab.org/blog/2014/08/07/resources-for-github-n00bs/> (noted as dated from 2014), <https://dynamicecology.wordpress.com/2015/05/28/my-first-experience-with-github-for-sharing-data-and-code/>, a Software Carpentry lesson at <https://swcarpentry.github.io/git-novice/>, and <https://towardsdatascience.com/getting-started-with-git-and-github-6fcd0f2d4ac6> (noted as a favorite from March 2019). The interface also shows options to start a discussion, filter by 'Recent' or 'Pinned', and a 'Reply...' input field.

Step 1: Sign up and installation!

- Sign up for a **Github** account
- Install **Git**
 - <https://git-scm.com/downloads>
- Open terminal and set your username on your computer

```
git config --global user.name  
"<your_name_here>"
```

If you want to set your name for just one repository, leave out the word "global."

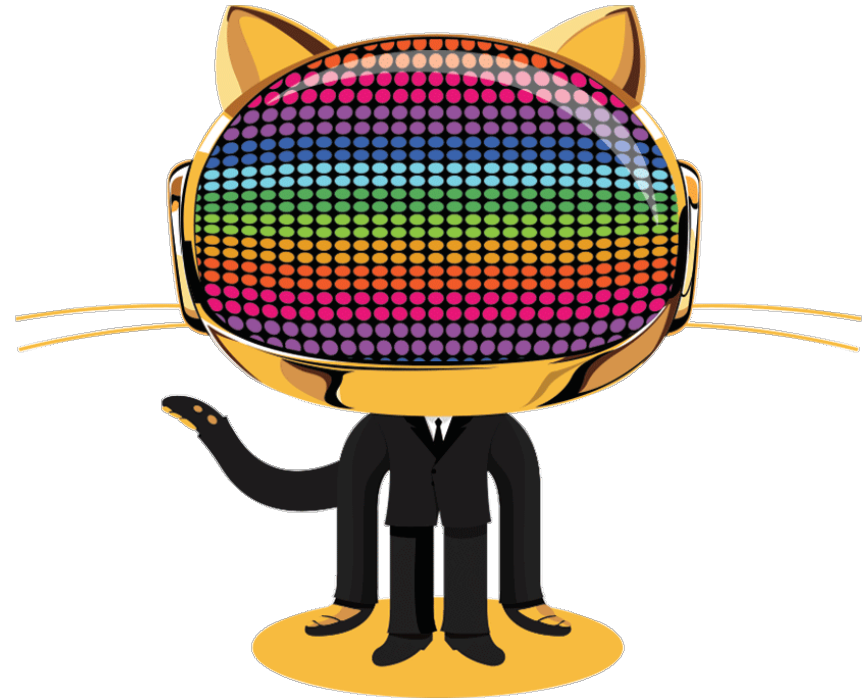
- Tell Git your email, and make sure it's the same email you used when you signed up for GitHub

```
git config --global user.email  
"<your_email@email.com>"
```

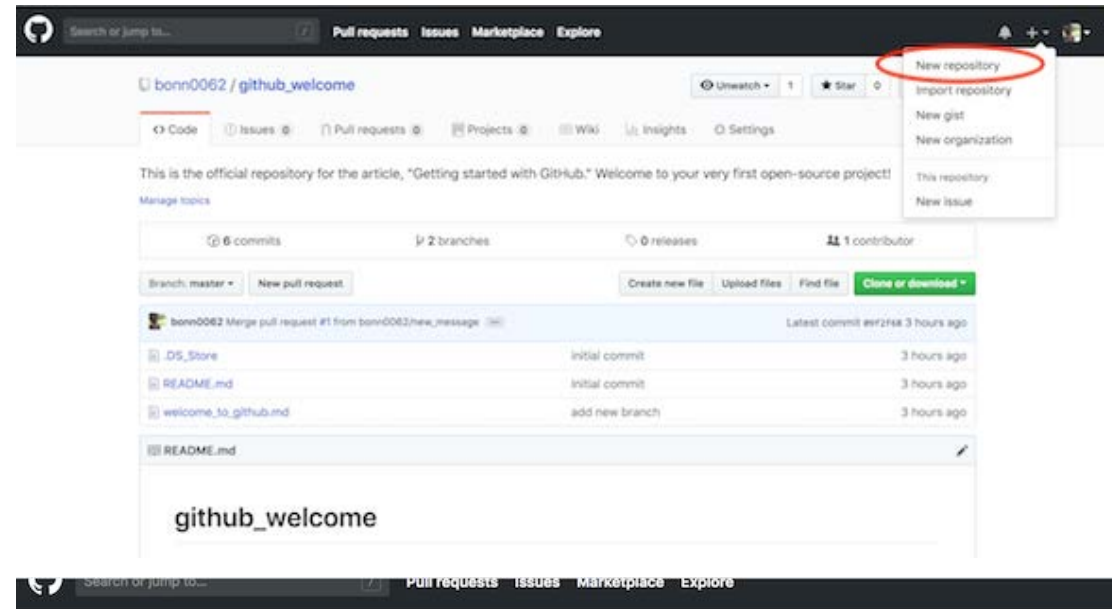


(website interface)

- **Repository** - where you'll organize your project
 - folders, files, images, videos, spreadsheets, Jupyter notebooks, data sets, and anything else your project needs
 - Need to initialize and set it up BEFORE **Git** will manage it
 - Always include a README file with info about the project



- Go to the GitHub website, look in the upper right corner, and click the + sign and then click “New repository.”
- Name the repository, and add a quick description.
- Decide whether you want this to be a public or a private repository
- Click “Initialize this repository with a README” if you want to include the README file.



Create a new repository

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

Owner: bonn0062

Repository name: github_welcome ✓

Great repository names are short and memorable. Need inspiration? How about fantastic-meme?

Description (optional): This is the official repository for the article, "Getting started with GitHub." Welcome to your very first open

☒ 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.

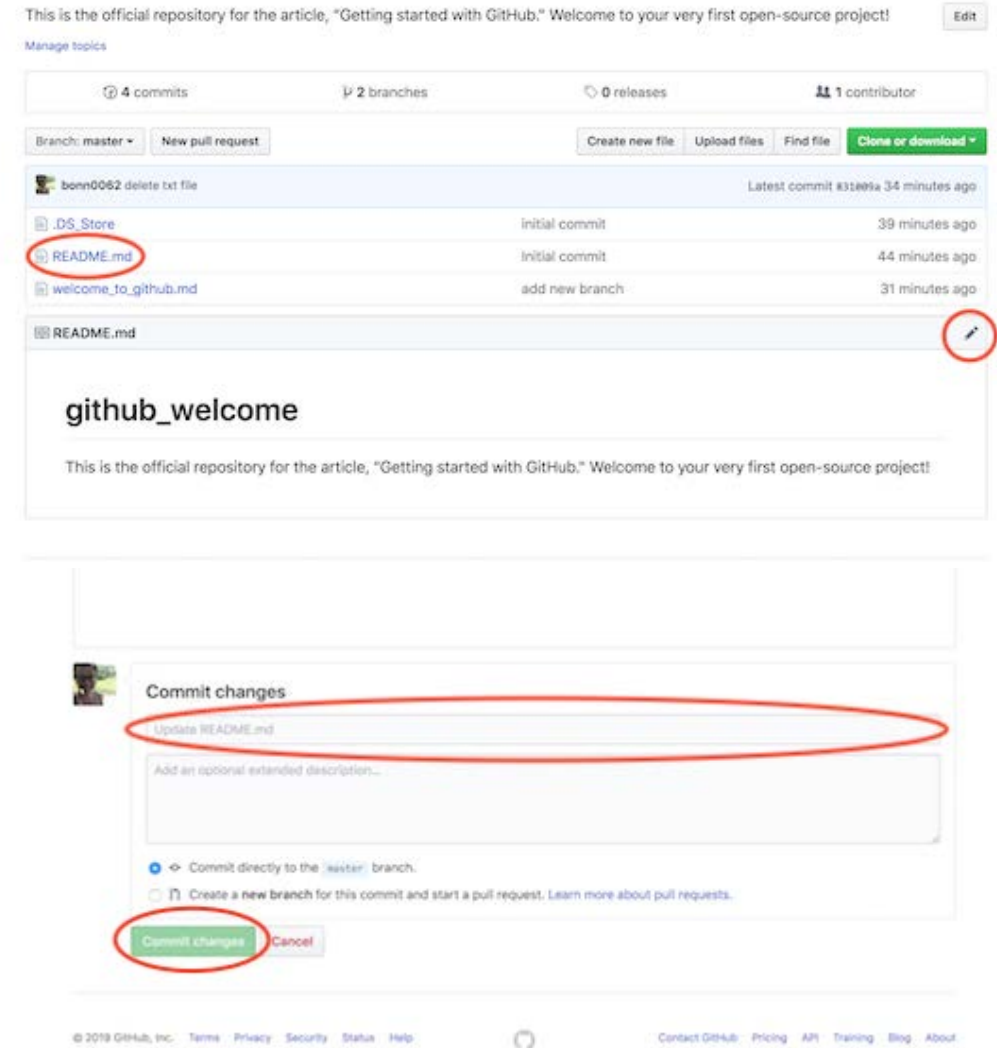
Add .gitignore: None Add a license: None ⓘ

Create repository

Making Edits

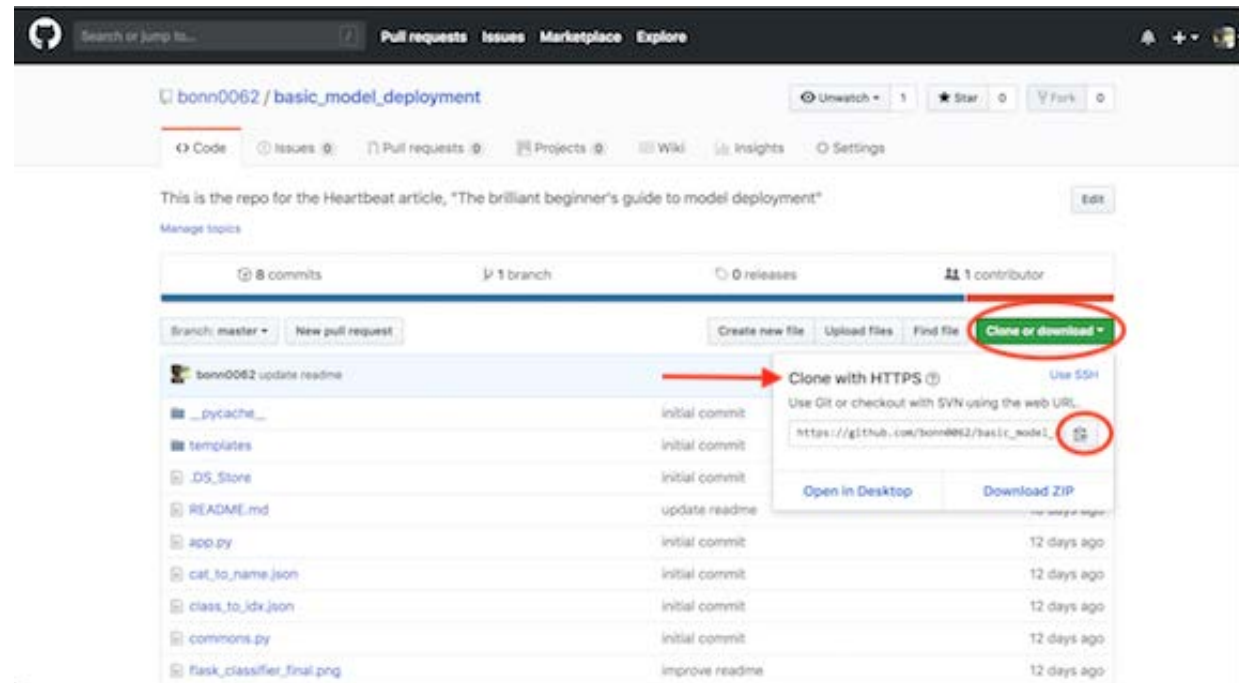
- Directly on **Github**

- Open repository
- Click on the name of the file and bring up that file
- Click the pencil icon in the upper right corner of the file and make some changes.
- Write a short message in the box that describes the changes you made (and an extended description if you want).
- Click the “Commit changes” button.



Working with repositories

- **clone a repository** onto your computer -> go to the repository on the GitHub website and click the big green button that says *“Clone or download.”*
- **Make sure it says “Clone with HTTPS.”**
- Click the clipboard icon to copy and paste it to your clipboard (or highlight that link and copy it).



Working with repositories

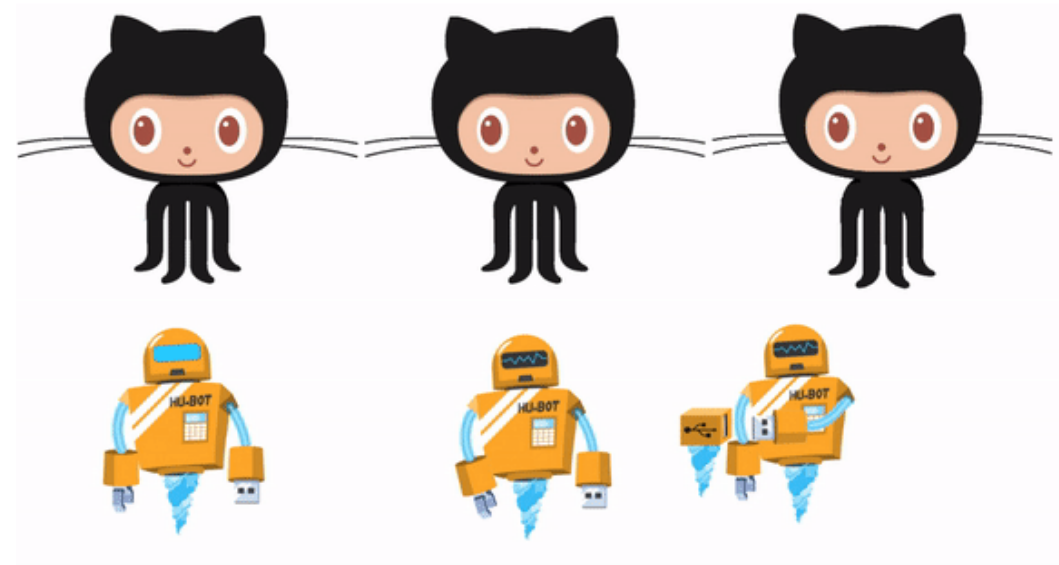
- Open your terminal and go to the place where you want to save your repository

cd Desktop

- To clone the repository:

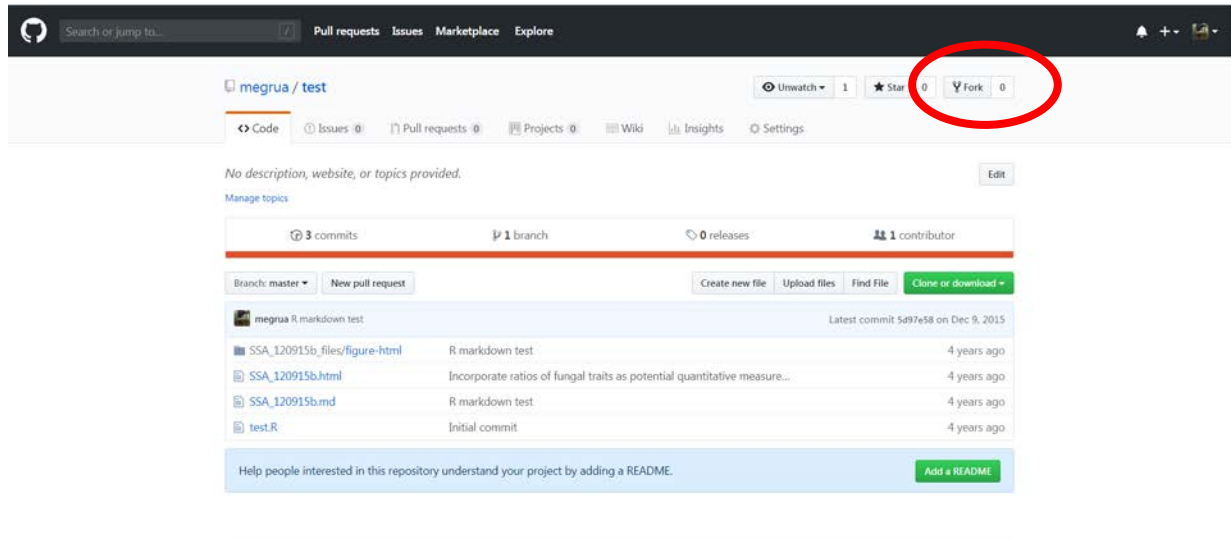
git clone

<that_thing_you_just_copied>



Working with repositories

- If you want to modify the repository without changing the original, you can **fork** it on the **Github** website



Adding files to repositories

- Find your files and drag and drop them into the new folder for the repository that you created on your desktop
- In your terminal, navigate to the folder for your repository

cd test

- Check the status of the folder to see if everything is up to date

git status

- To add one file:

git add "<filename>"

- You add everything with:

git add --all OR *git add .*

NOTE: You're not actually changing anything yet, just bringing new files and changes to Git's attention

Adding files to repositories

- When you save a change, that's called a commit.
- When you make a commit, you'll include a message about what you changed and/or why you changed it. This is a great way to let others know what you've changed and why.
- To commit changes to the HEAD (local) repository:

git commit --m "<commit message>"

- To send the change to the remote (Github) repository:

git push

