

Guide to Using GitHub

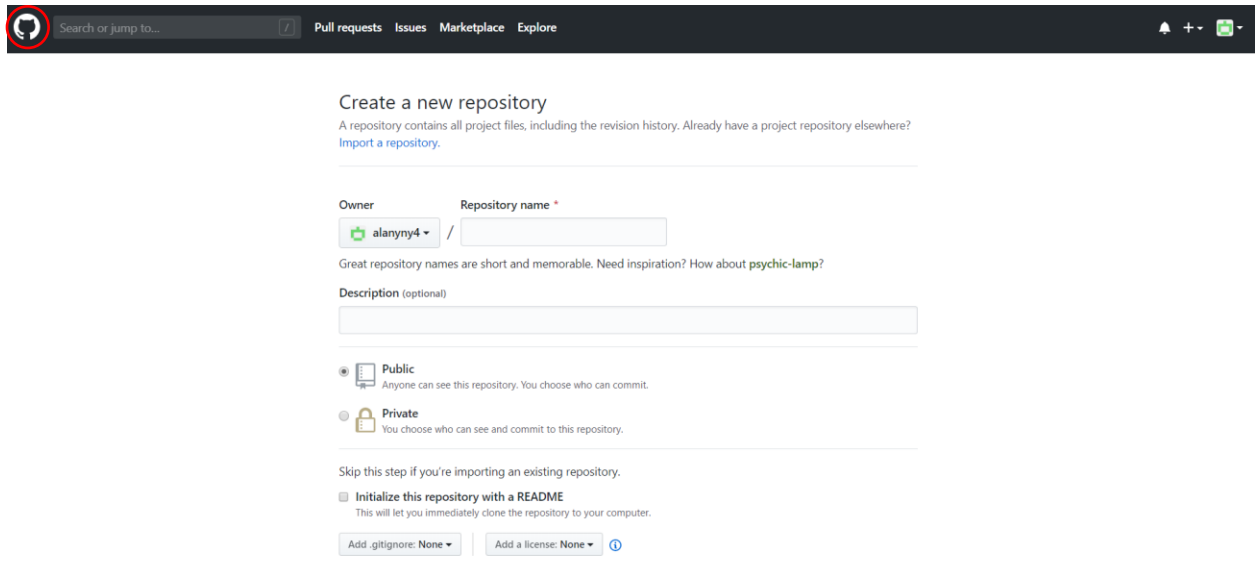
This is a introductory guide to using GitHub and a user-friendly interface for working with GitHub – GitHub Desktop.

1) Signing up for GitHub

1. Sign up for a GitHub account: <https://github.com/>

- 1) Sign up for the Free plan
- 2) Verify email

2. After you verify your email, you will see this page:

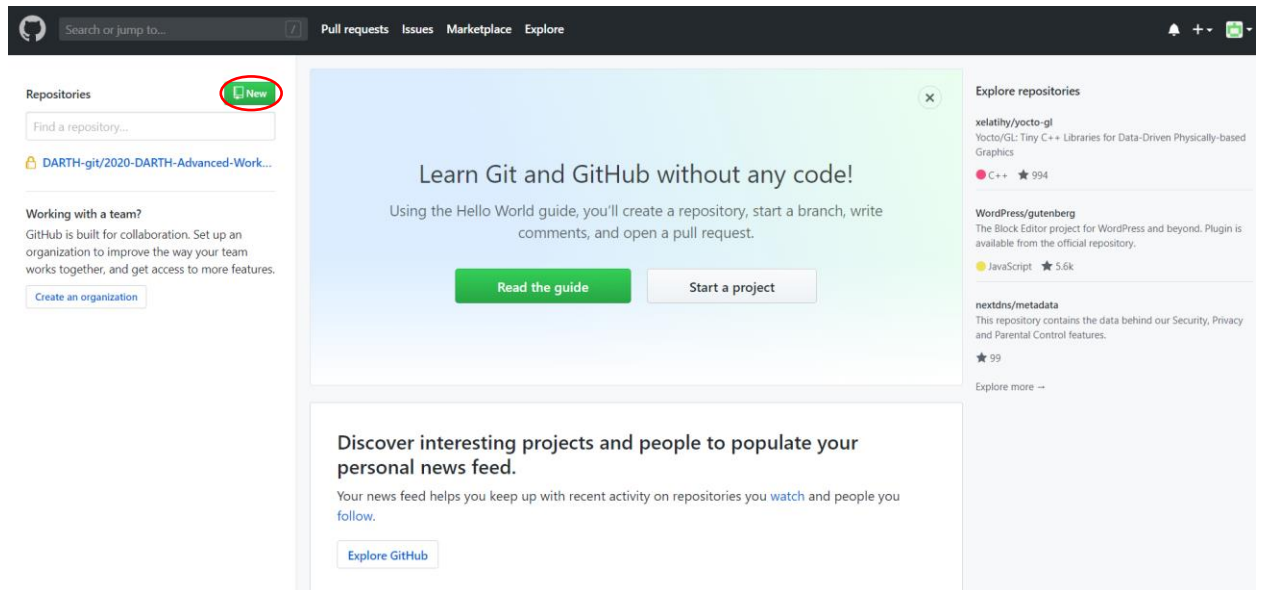


Do not create a new repository. Simply click the GitHub icon on the top-left corner (circled in red in the picture).

***Steps 1 and 2 should only be done when you first sign up for GitHub*

2) Creating your own GitHub repository

1. Click the GitHub icon at the top-left corner again. This brings you to your GitHub homepage. Click the “New” button to create your own repository for the workshop. This is where you submit your data and R code for us to review.



2. Create the repository as follows:

Create a new repository

A repository contains all project files, including the revision history. Already have a project repository elsewhere? [Import a repository.](#)

Repository template

Start your repository with a template repository's contents.

No template ▼

Owner *



alanyang0924 ▼



Repository name *

test



Great repository names are short and memorable. Need inspiration? How about **cautious-funicular**?

Description (optional)

This repository will be used for the GitHub guide.



Public

Anyone on the internet can see this repository. You choose who can commit.



Private

You choose who can see and commit to this repository.

Skip this step if you're importing an existing repository.

☒ Initialize this repository with a README

This will let you immediately clone the repository to your computer.

Add .gitignore: None ▼

Add a license: None ▼



Create repository

- 1) Name your repository. In this demo, I named it “DARTH Advanced Workshop firstname lastname”
- 2) Add a description if you want
- 3) Make the repository private (or public). We recommend making it private for your team/yourself when you start a project. When it is ready for public release, you can change the setting to ‘public’.

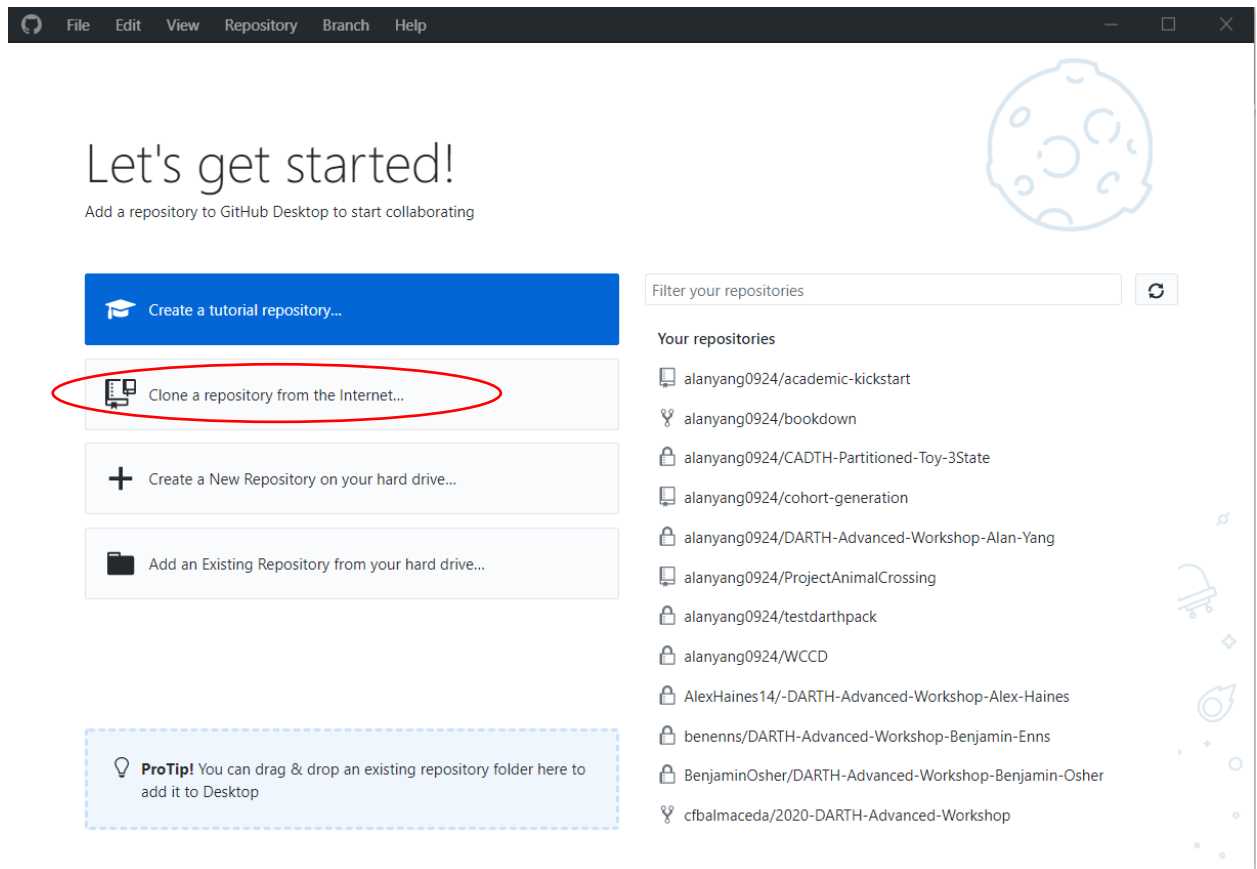
- 4) Initialize it with a README. This makes sure the description is added.

3) Using GitHub Desktop

1. Now, we will move away from the GitHub website to install GitHub Desktop, a super user-friendly interface for GitHub. Navigate to:
<https://desktop.github.com/>
2. You do not need to sign up for a GitHub Desktop account, you can log in with your GitHub account later. Simply download and install the software.



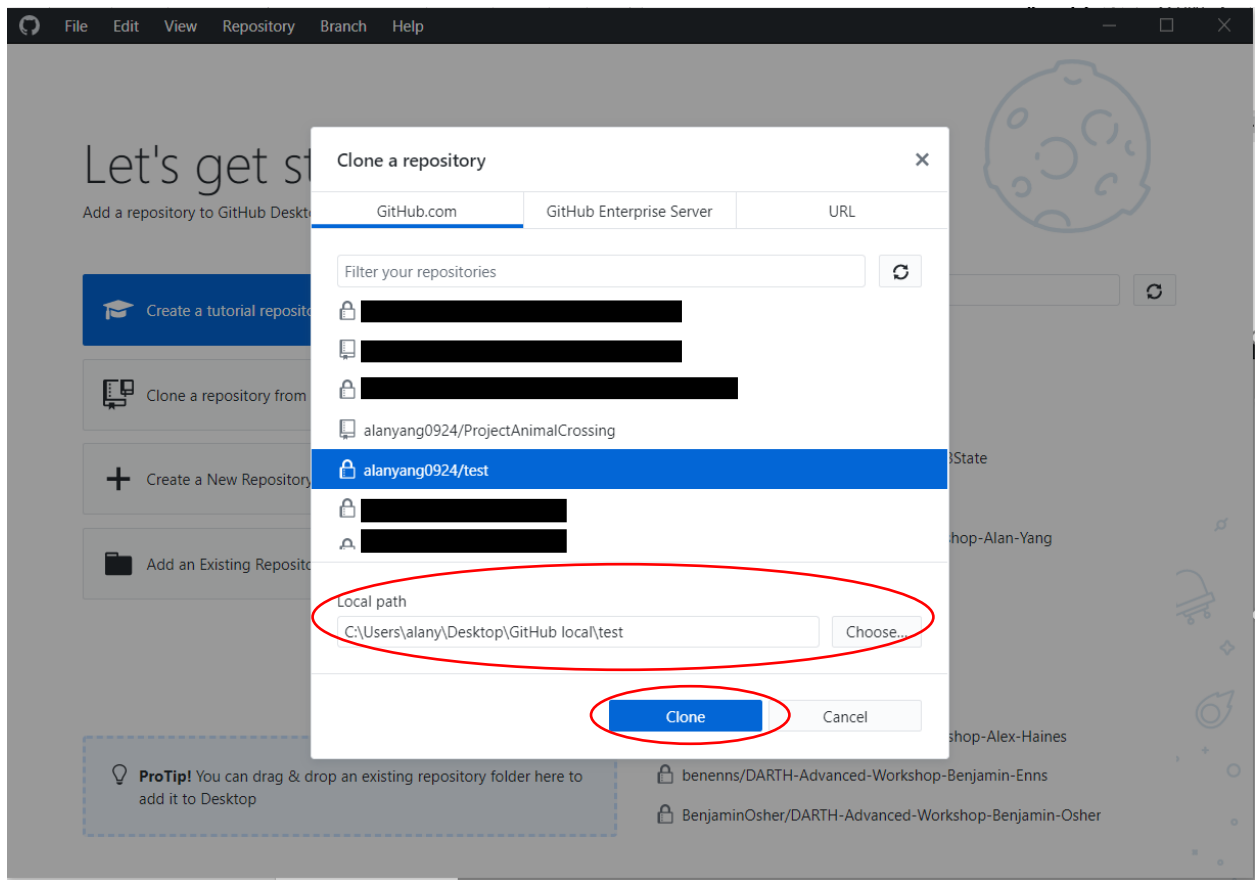
3. Open the software and choose to sign in with GitHub. Then you will see:



Click “Clone a repository from the Internet”.

** Cloning a repo means creating a **folder on your computer** that represents a **local copy** of your **remote repository** from GitHub

4. You will then see a list of repositories in your GitHub account:



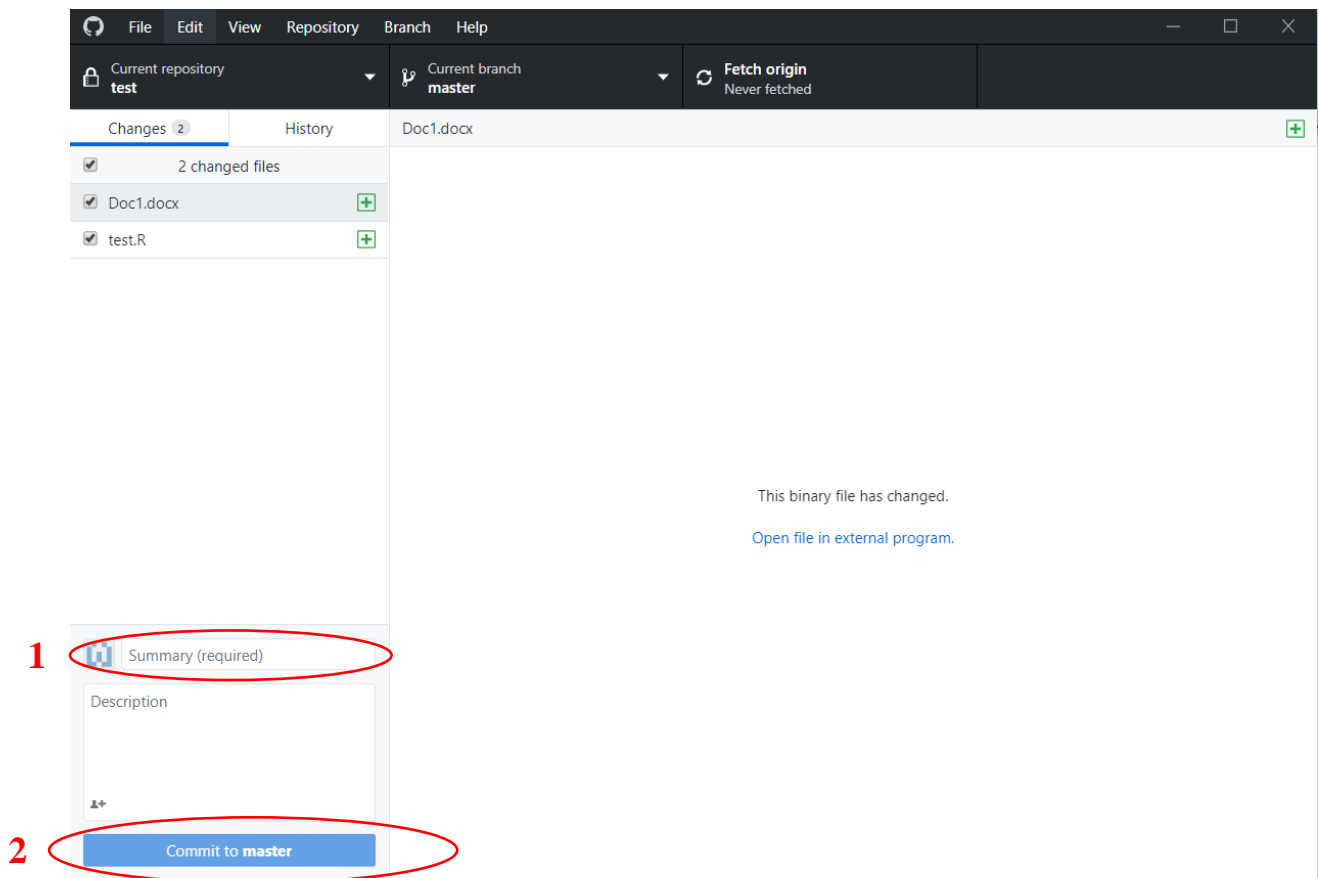
Specify the location/path on your computer you want the local copy of your repository to reside in and click “Clone”.

5. GitHub Desktop has now created a folder that represents the local copy of your remote repo from GitHub. At this point the folder should only contain a “README.md” file. From now on you will work within this local folder and **push changes** to the remote version of your repo on GitHub. Push will be explained later.

*** GitHub does not allow you to make changes directly your remote repos, you must make changes locally first (in local copies of remote repos), then use GitHub Desktop to push/update the changes to remote.*

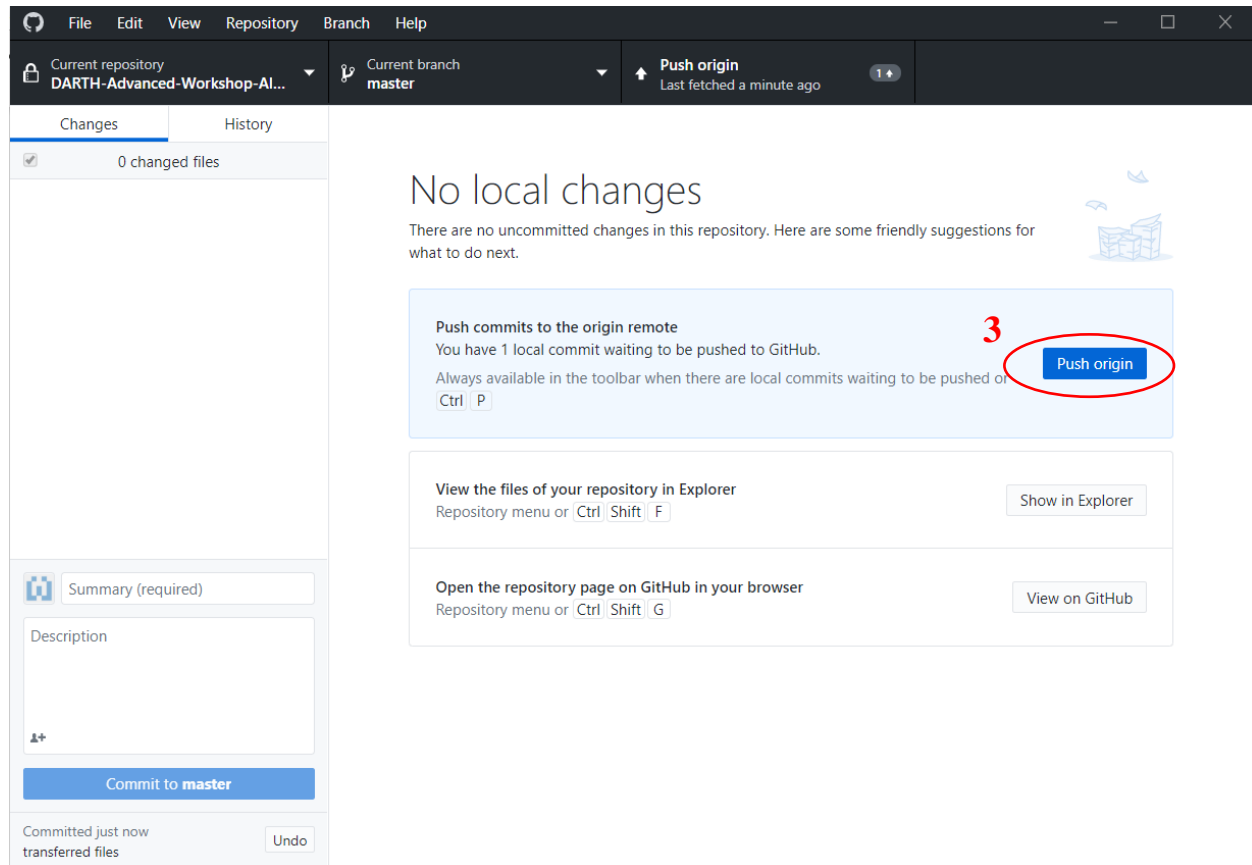
6. You can now add/remove/modify files to the local folder. Any changes to the files in the folder will be reflected on GitHub Desktop. For example, I added an R script and a Word doc to the local folder.

7. Now switch to GitHub Desktop. You will see:



Now, perform the follow **3 steps**:

1. Add a summary (description is optional)
2. Commit changes to master
3. Push the changes to remote repo on GitHub



*** These 3 steps are key to using GitHub and GitHub Desktop. You first make the changes to the files in your local repo folder. Once you are done with the changes, you follow the above 3 steps to push the changes to your remote repo on GitHub.*

*** If you don't push your changes, all changes you make will stay local. They will **never** be reflected on GitHub online.*

At this stage you have learned the basics of GitHub and GitHub Desktop!

The basic idea is to add/remove/modify files in the local folder linked to your remote repo. Then, push the changes to the remote repo. You want to do this every time you are done with making changes to the files.

4) Cloning a public repo

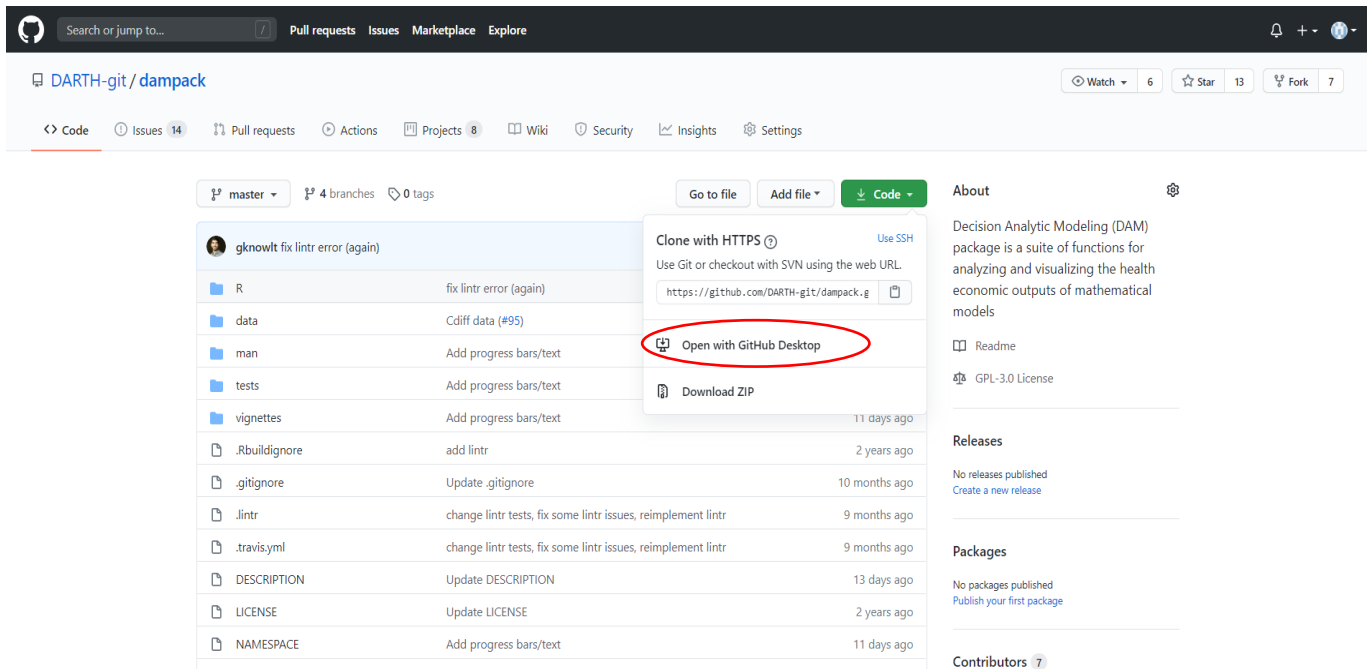
You can also choose to clone someone else's public repositories.

1. Go to the main page of the public repo you wish to clone. You can either get there via its website URL or search for it on GitHub.
2. Here is a public repository's main page:

The screenshot shows the GitHub repository page for `DARTH-git/dampack`. The repository has 6 watchers, 13 stars, and 7 forks. The main content area displays a list of files and folders, including `R`, `data`, `man`, `tests`, `vignettes`, `.Rbuildignore`, `.gitignore`, `.lintr`, `.travis.yml`, `DESCRIPTION`, `LICENSE`, and `NAMESPACE`. The right sidebar contains the repository's description, a README link, the GPL-3.0 license, and sections for releases and packages.

File/Folder	Description	Last Commit
<code>R</code>	fix lintr error (again)	7 days ago
<code>data</code>	Cdiff data (#95)	12 months ago
<code>man</code>	Add progress bars/text	11 days ago
<code>tests</code>	Add progress bars/text	11 days ago
<code>vignettes</code>	Add progress bars/text	11 days ago
<code>.Rbuildignore</code>	add lintr	2 years ago
<code>.gitignore</code>	Update .gitignore	10 months ago
<code>.lintr</code>	change lintr tests, fix some lintr issues, reimplement lintr	9 months ago
<code>.travis.yml</code>	change lintr tests, fix some lintr issues, reimplement lintr	9 months ago
<code>DESCRIPTION</code>	Update DESCRIPTION	13 days ago
<code>LICENSE</code>	Update LICENSE	2 years ago
<code>NAMESPACE</code>	Add progress bars/text	11 days ago

3. Click the ‘code’ button and select ‘Open with GitHub Desktop’.



The screenshot shows the GitHub repository page for `DARTH-git/dampack`. The repository has 6 watches, 13 stars, and 7 forks. The 'Code' button is highlighted, and a dropdown menu is open, showing the following options:

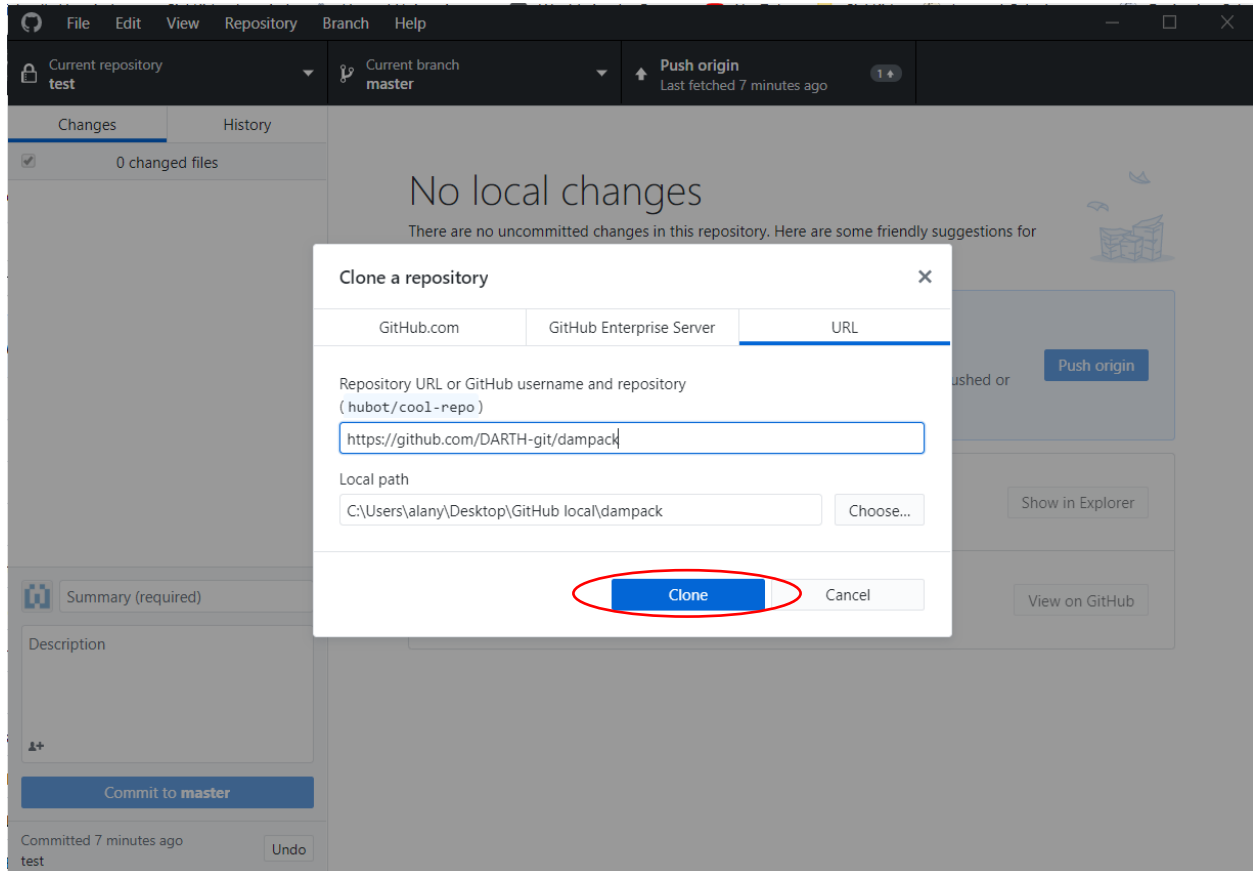
- Go to file
- Add file
- Code (selected)
- Clone with HTTPS (with a tooltip: 'Use Git or checkout with SVN using the web URL. https://github.com/DARTH-git/dampack.g')
- Open with GitHub Desktop (highlighted with a red circle)
- Download ZIP

The repository's file list is visible on the left, showing a commit by `gknowlt` titled 'fix lintr error (again)'. The files listed are:

- R (fix lintr error (again))
- data (Cdfff data (#95))
- man (Add progress bars/text)
- tests (Add progress bars/text)
- vignettes (Add progress bars/text)
- .Rbuildignore (add lintr, 11 days ago)
- .gitignore (Update .gitignore, 2 years ago)
- .lintr (change lintr tests, fix some lintr issues, reimplement lintr, 10 months ago)
- .travis.yml (change lintr tests, fix some lintr issues, reimplement lintr, 9 months ago)
- DESCRIPTION (Update DESCRIPTION, 9 months ago)
- LICENSE (Update LICENSE, 13 days ago)
- NAMESPACE (Add progress bars/text, 2 years ago)

The right sidebar contains the 'About' section, which describes the Decision Analytic Modeling (DAM) package as a suite of functions for analyzing and visualizing the health economic outputs of mathematical models. It also includes links to the README, GPL-3.0 License, Releases, Packages, and Contributors.

4. The below window will pop up. Select the local path (local folder) you wish to link to this cloned repo and click ‘Clone’.



5) Inviting collaborators

1. Visit the main page of your GitHub repo and go to “Settings”.

The screenshot shows the GitHub interface for a repository named 'test' by user 'alanyang0924'. The repository is private. At the top, navigation tabs include Code, Issues, Pull requests, Actions, Projects, Wiki, Security, Insights, and Settings (which is circled in red). On the right, there are buttons for Unwatch, 1 Star, and 0 Fork. Below the navigation bar, the repository details show the 'master' branch with 1 branch and 0 tags. A commit by 'alanyang0924' is listed with the message 'Initial commit' and a commit hash 'cb1fb3a' from 2 hours ago. The README.md file is also shown, with the title 'test' and the content 'This repository will be used for the GitHub guide.' On the right sidebar, there are sections for 'About' (stating the repository is for the GitHub guide), 'Releases' (no releases published), and 'Packages' (no packages published).

2. Go to “Manage access”. You might be asked to enter your password.

alanyang0924 / testPrivate

<> Code🔔 Issues🔗 Pull requests🔄 Actions📁 Projects📖 Wiki🔒 Security📊 Insights⚙️ Settings

OptionsManage accessSecurity & analysisBranchesWebhooksNotificationsIntegrationsDeploy keysAutolink referencesSecretsActions

Settings

Repository name

testRename

☐ **Template repository**

Template repositories let users generate new repositories with the same directory structure and files. [Learn more.](#)

Social preview

⚠️ You can upload a social image, but it will not be visible publicly while alanyang0924/test is private.

Upload an image to customize your repository's social media preview.

Images should be at least 640×320px (1280×640px for best display).

[Download template](#)

3. Click on “Invite a collaborator”.

The screenshot shows the GitHub repository settings page for 'alanyang0924/test'. The repository is marked as 'Private'. The left sidebar contains a list of settings: Options, Manage access (highlighted with a red border), Security & analysis, Branches, Webhooks, Notifications, Integrations, Deploy keys, Autolink references, Secrets, and Actions. The main content area is titled 'Who has access' and shows two sections: 'PRIVATE REPOSITORY' and 'DIRECT ACCESS'. The 'PRIVATE REPOSITORY' section states 'Only those with access to this repository can view it.' and has a 'Manage' link. The 'DIRECT ACCESS' section states '0 collaborators have access to this repository. Only you can contribute to this repository.' Below these sections is a 'Manage access' section with a message 'You haven't invited any collaborators yet' and a green button labeled 'Invite a collaborator' which is circled in red.

alanyang0924 / test Private

<> Code Issues Pull requests Actions Projects Wiki Security Insights Settings

Options
Manage access
Security & analysis
Branches
Webhooks
Notifications
Integrations
Deploy keys
Autolink references
Secrets
Actions

Who has access

PRIVATE REPOSITORY

Only those with access to this repository can view it.

[Manage](#)

DIRECT ACCESS

0 collaborators have access to this repository. Only you can contribute to this repository.

Manage access

You haven't invited any collaborators yet

[Invite a collaborator](#)

You can invite anyone to your repository by their username, full name or email.
You can also set their role and privileges.