

Cloud Computing

Setup the repository for app, 建立應用程式的資源庫.

Requirements

1. [git \(https://git-scm.com/\)](https://git-scm.com/) tool for version control system, 版本管理系統;
2. [github \(https://github.com/\)](https://github.com/) site of repository stored; register an account , 儲存資源庫的網站 , 先註冊帳號
3. [smartgit \(https://www.syntevo.com/smartgit/\)](https://www.syntevo.com/smartgit/) gui git client app, 圖形化 git 應用程式,

In [1]:

```
1 from IPython.display import Image
```

```
In [4]: ▼ 1 # Create a new repository on GitHub, for instance 2023-test
2 # 首先在 GitHub 上面新增一個資源庫, 叫做 2023-test
3
4 Image("github/create_repo.png",width=1000)
```

Out[4]:

Welcome to Brave

Settings - About Brave

IMathAS-2022

Create a New Repository

github.com/new

Create a new repository

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

Owner *

Repository name *

cchuang2009


/

2023-test


Great repository names are short and memorable. Need inspiration? How about [refactored-spork?](#)

Description (optional)

How to establish connection between local box and github official site

☒  **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.

Initialize this repository with:

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

☐ **Add a README file**

This is where you can write a long description for your project. [Learn more.](#)

Add .gitignore

Choose which files not to track from a list of templates. [Learn more.](#)

.gitignore template: None

streamlit-plotl....zip

smartgit-lin....tar.gz

Show all

```
In [6]: ▼ 1 # 2. after created repo, it should tell you how to go next, 接著 github 會告訴你如何進行下一步  
2  
3 Image("github/init_repo1.png",width=1000)  
4
```

Out[6]:

The screenshot shows a web browser window with the GitHub repository page for `cchuang2009/2023-test`. The browser's address bar shows the URL `github.com/cchuang2009/2023-test`. The repository page has a dark header with the GitHub logo, a search bar, and navigation links for Pull requests, Issues, Codespaces, Marketplace, and Explore. Below the header, the repository name `cchuang2009 / 2023-test` is displayed, along with buttons for Pin, Unwatch (1), Fork (0), and Star (0). A navigation bar below the repository name includes links for Code, Issues, Pull requests, Actions, Projects, Wiki, Security, Insights, and Settings. The main content area features a light blue box with the heading "Quick setup — if you've done this kind of thing before". This box contains a section for cloning the repository via HTTPS or SSH, with the HTTPS URL `https://github.com/cchuang2009/2023-test.git` highlighted. Below this, a section titled "...or create a new repository on the command line" provides a list of Git commands to initialize a new repository and push it to the remote. A third section, "...or push an existing repository from the command line", shows the command to add a remote repository. At the bottom of the page, there is a file upload bar showing two files: `streamlit-plotl....zip` and `smartgit-lin....tar.gz`, with a "Show all" button and a close icon.

Welcome to Brave | Settings - About Brave | IMathAS-2022 | cchuang2009/2023-test

github.com/cchuang2009/2023-test

Search or jump to... / Pull requests Issues Codespaces Marketplace Explore

cchuang2009 / 2023-test Public

Pin Unwatch 1 Fork 0 Star 0

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

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

or HTTPS SSH `https://github.com/cchuang2009/2023-test.git`

Get started by [creating a new file](#) or [uploading an existing file](#). We recommend every repository include a [README](#), [LICENSE](#), and [.gitignore](#).

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

```
echo "# 2023-test" >> README.md
git init
git add README.md
git commit -m "first commit"
git branch -M main
git remote add origin https://github.com/cchuang2009/2023-test.git
git push -u origin main
```

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

```
git remote add origin https://github.com/cchuang2009/2023-test.git
```

streamlit-plotl....zip ^ smartgit-lin....tar.gz ^ Show all x

Now we have to create the directory for repository, 接下來我們將新增貯存資源庫的目錄.

1. execute terminal app , (press "Windows + R" and input cmd for MS Windows, 執行終端機程式，如果使用微軟 Windows 系統使用組合鍵 "Windows + R"，並輸入 cmd 啟動.
2. create directory, named "2023-test", and enter to the directory, 新增目錄，"2023-test"，並進入該目錄.
3. To establish the connection between Github and local box, we have to generate "api token". Login github , and choose, 為了建立自己的電腦系統和 GitHub 的連結，我們必須新增 "api token"，進入網站 Github:

[Setting (Top right)] → [Developer setting (left bottom)]



[Personal access tokens (left column)] → [Fine-grained tokens] → [Create new token]

to create new token , named githubapi for instance, 由上面的步驟產生新的 token，並叫做 githubapi .

4. Setup this api token for accessing, 設定相關事項,
 - Repository access (資源庫的存取): • Public Repositories (read-only)
 - Permissions : enable all the necessary options. If don't know, just enable all options. Late, you can update the setting if not work, 准許必要的服務選項，如果不知道怎麼選取，可以全部選取.如果仍然不能夠運作，還可以修正.

In [7]: 1 Image("github/auth.png",width=1000)

Out[7]:

Welcome to Brave | Settings - About Brave | IMathAS-2022 | cchuang2009/2023-test | About remote repositories x

docs.github.com/en/get-started/getting-started-with-git/about-remote-repositories#cloning...

GitHub Docs | Version: Free, Pro, & Team | Search GitHub Docs

Get started / Getting started with Git / About remote repositories

Cloning with HTTPS URLs

The `https://` clone URLs are available on all repositories, regardless of visibility. `https://` clone URLs work even if you are behind a firewall or proxy.

When you `git clone`, `git fetch`, `git pull`, or `git push` to a remote repository using HTTPS URLs on the command line, Git will ask for your GitHub username and password. When Git prompts you for your password, enter your personal access token. Alternatively, you can use a credential helper like [Git Credential Manager](#). Password-based authentication for Git has been removed in favor of more secure authentication methods. For more information, see "[Creating a personal access token](#)."

If you are accessing an organization that uses SAML SSO and you are using a personal access token (classic), you must also authorize your personal access token to access the organization before you authenticate. For more information, see "[About authentication with SAML single sign-on](#)" and "[Authorizing a personal access token for use with SAML single sign-on](#)."

Tips:

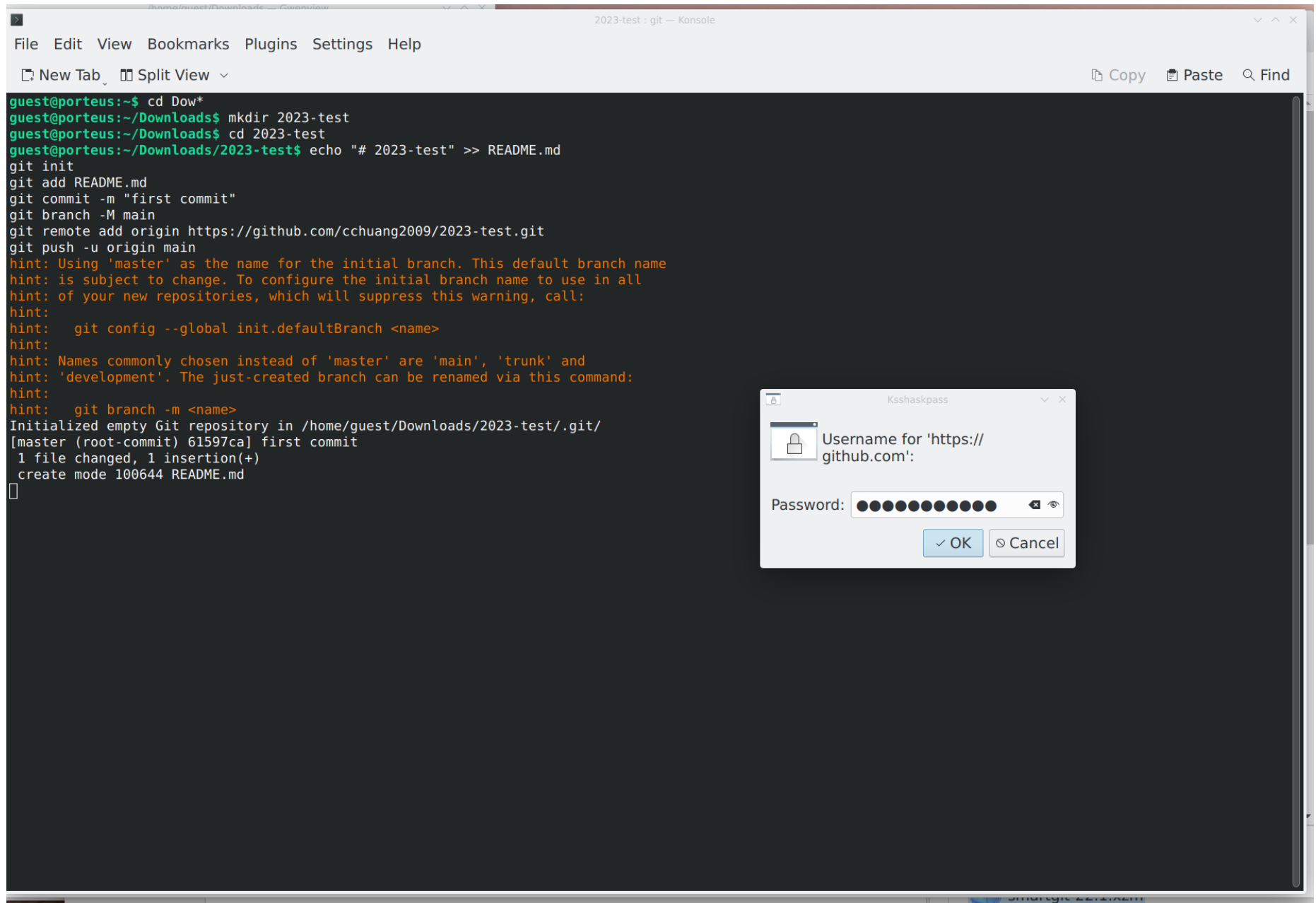
- You can use a credential helper so Git will remember your GitHub credentials every time it talks to GitHub. For more information, see "[Caching your GitHub credentials in Git](#)."
- To clone a repository without authenticating to GitHub on the command line, you can use GitHub Desktop

streamlit-plotl....zip ^ | smartgit-lin....tar.gz ^ | Show all x

5. To initial the repository, 2023-test , run the shell commends in directory, 2023-test : input the username in popup windows, the part before @gmail.com if use gmail account to register; and input **api token** created above in passwords input (but not the passwords used for github.com). 在自己的電腦上面初始化資源庫， 2023-test ，在目錄中執行下列指令：並在彈跳的視窗中輸入使用者帳號，如果是用 gmail 設定 github 帳號, 輸入 @gmail.com 之前的使用者名稱即可，在輸入密碼的時候，輸入剛剛產生的 apitoken . 而不是輸入進入 github.com 的密碼

In [11]: 1 Image("github/init_repo2.png",width=1000)

Out[11]:



6. Now startup `smartgit` to take over the left work of software developing by github: push, pull etc. Something like, 啟動取代文字介面的軟體開發，上傳或下載工作檔案目錄資料，就像下面的工作一樣:

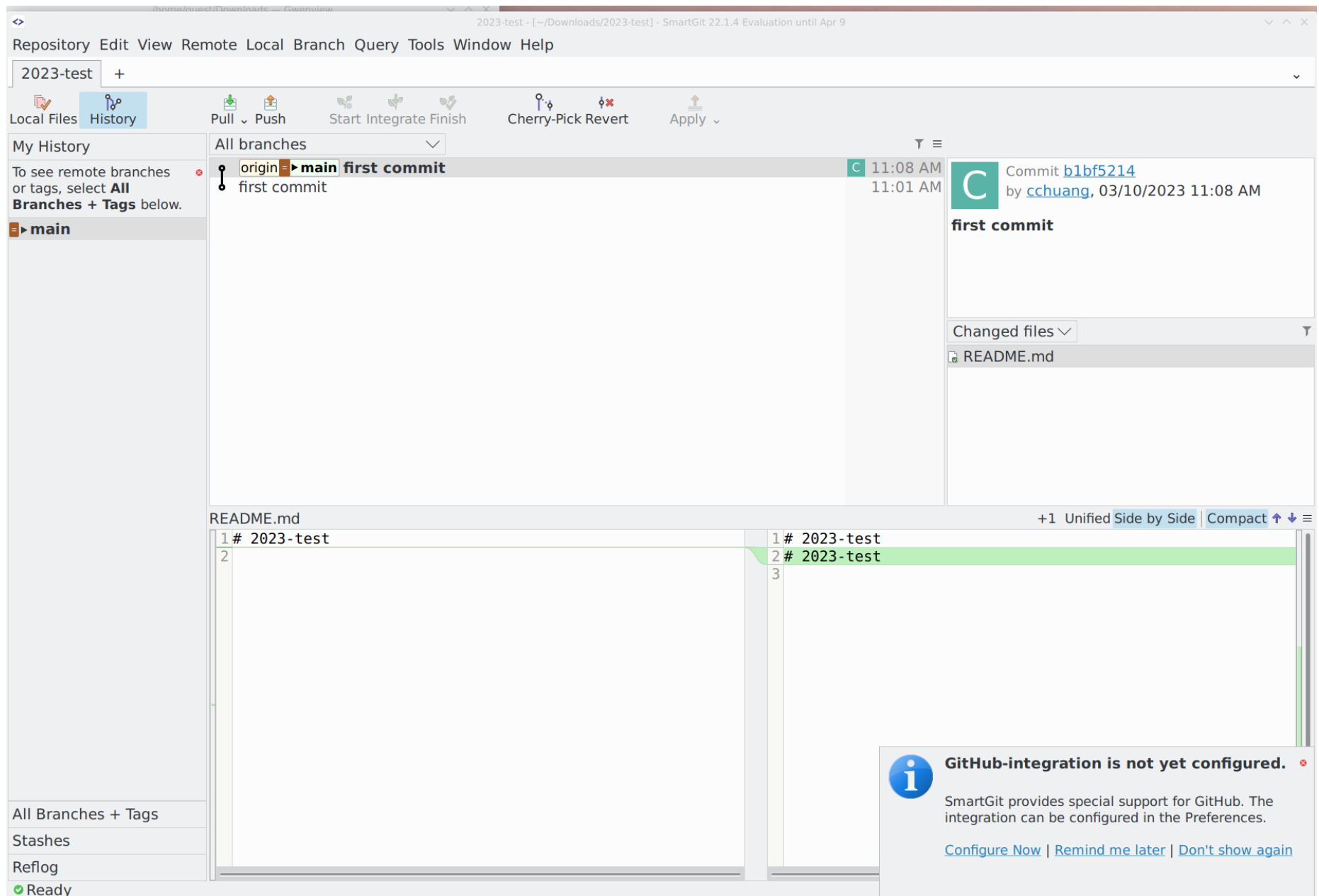
`copy files in the directory`, 將新增檔案放入目錄內

`[stage] → describe the change in the right region`, 工作重點描述, and `[commit] → [Push]`

Awhile, all the software maintenance will rely on such solution, 如此一來，所有的工作將藉由這個我架構維護.

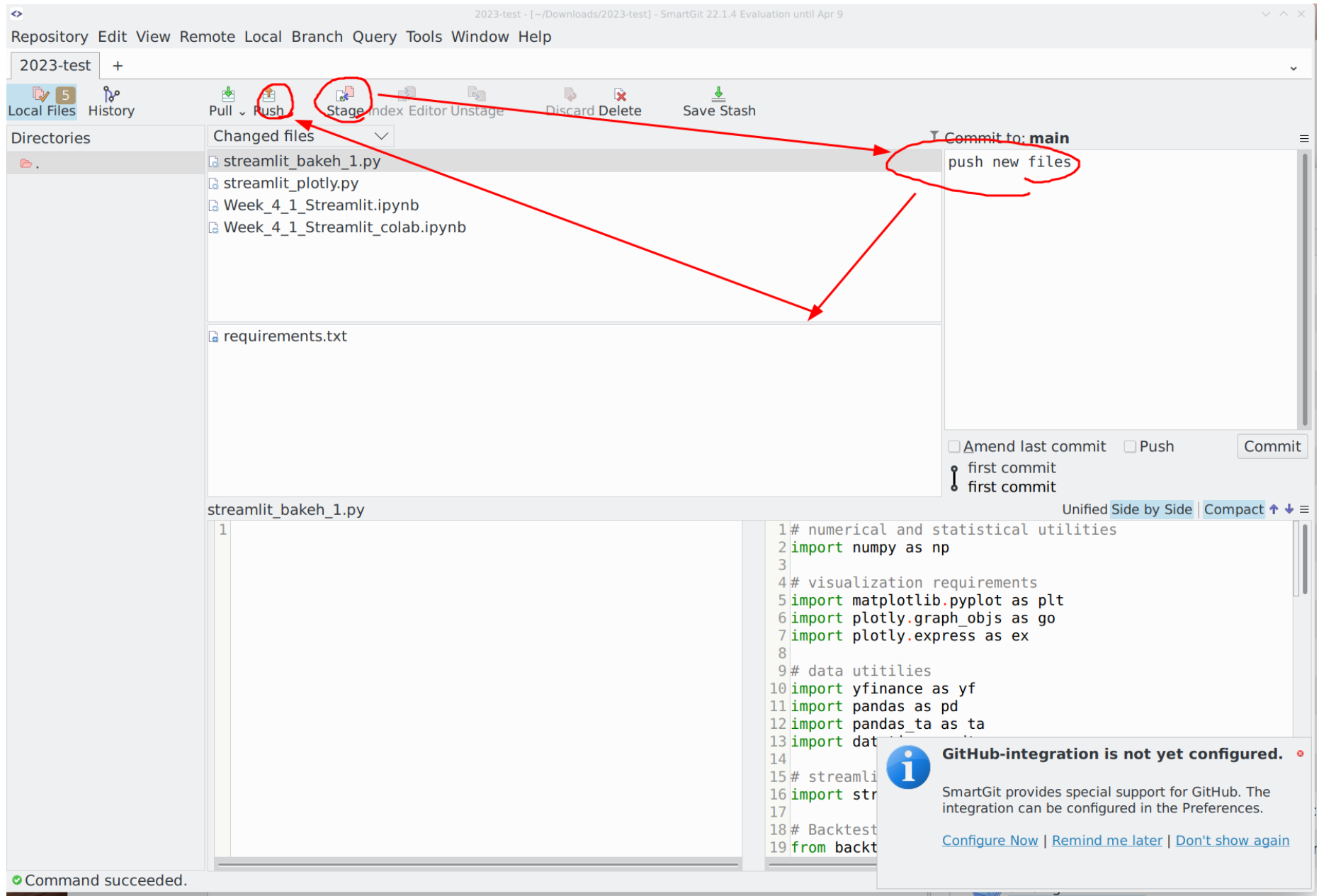
In [15]: 1 Image("github/smartgit-1.png",width=1000)

Out[15]:



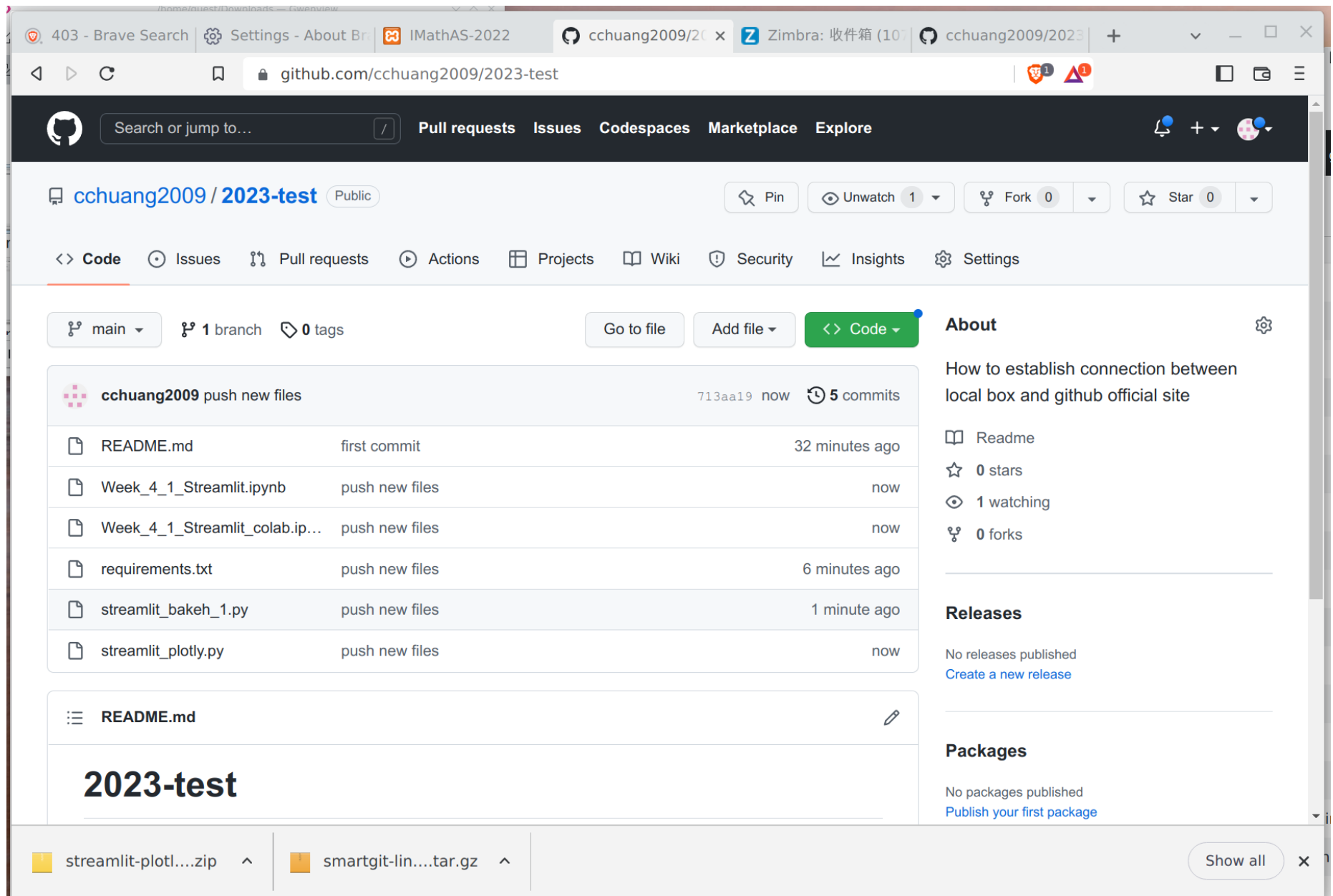
In [14]: 1 Image("github/smartgit-2.png",width=1000)

Out[14]:



```
In [13]: 1 Image("github/push.png",width=1000)
```

Out[13]:



In []:

1	
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