

Lab: GitHub Sign Up and Create Repo

Estimated time: 30 minutes

In this lab, you will get started with GitHub by creating a GitHub account and creating a new repository. You will then add a file to the repository using the GitHub web interface.

Objectives

After completing this lab, you will be able to:

1. Describe GitHub
2. Create a GitHub account
3. Add a file to a repository
4. Create and edit a file
5. Upload and commit a file

GitHub overview

Before we learn to use GitHub, let's first review Git. Git is an open-source command-line-based version-control system for software development. While Git is a command-line tool and you also need to host and maintain a server on which you can use Git for versioning. GitHub is a repository hosting service that uses Git. GitHub provides a web-based hosting service with a graphical user interface(GUI) and git command line interface (CLI). It also provides access control and several collaboration features, such as wikis and basic task management tools, for every project. GitHub provides cloud storage for source code, supports all popular programming languages, and streamlines the iteration process. GitHub includes a free plan for individual developers and for hosting open-source projects.

1. Creating a GitHub account

To create an account in GitHub, complete the following steps:

1. Go to the [GitHub](#) page and create an account. Note: If you already have a GitHub account, log in now.

2. Provide the necessary details to create an account as shown below.

The screenshot shows the GitHub sign-up form. It has three input fields with validation icons: a green checkmark for the username and email address, and a red exclamation mark for the password field. Below the password field is a note: "Make sure it's at least 15 characters OR at least 8 characters including a number and a lowercase letter." A link "Learn more." is provided. Under "Email preferences", there is a checked checkbox for "Send me occasional product updates, announcements, and offers". At the bottom left, there is a note: "3. Verify the account, and then click Submit."

First, let's create your user account

Username *

Email address *

Password *

Make sure it's at least 15 characters OR at least 8 characters including a number and a lowercase letter.
[Learn more.](#)

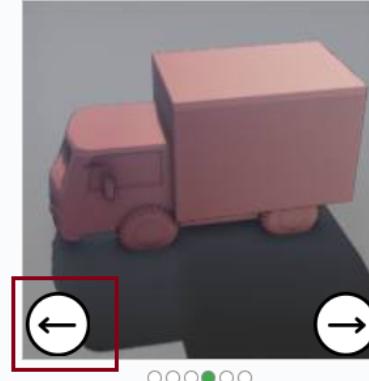
Email preferences

Send me occasional product updates, announcements, and offers.

3. Verify the account, and then click **Submit**.

Verify your account

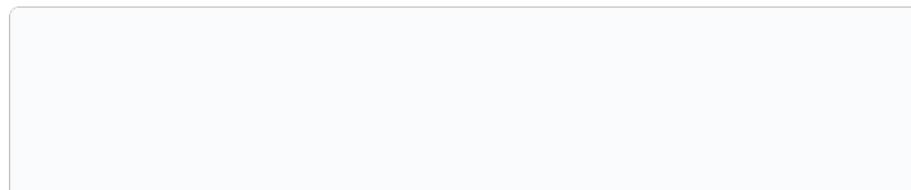
Use the arrows to rotate the object to face in the direction of the hand. (1 of 2)

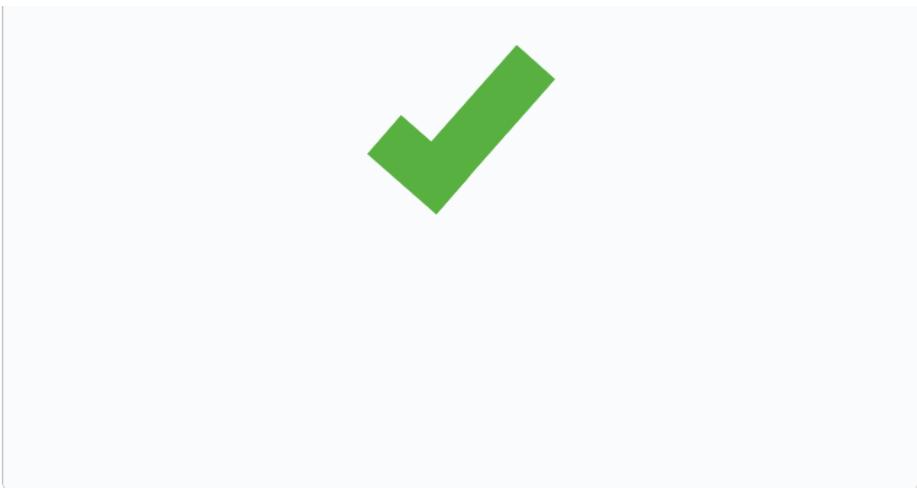


Submit

4. When you have finished, click **Create account**.

Verify your account

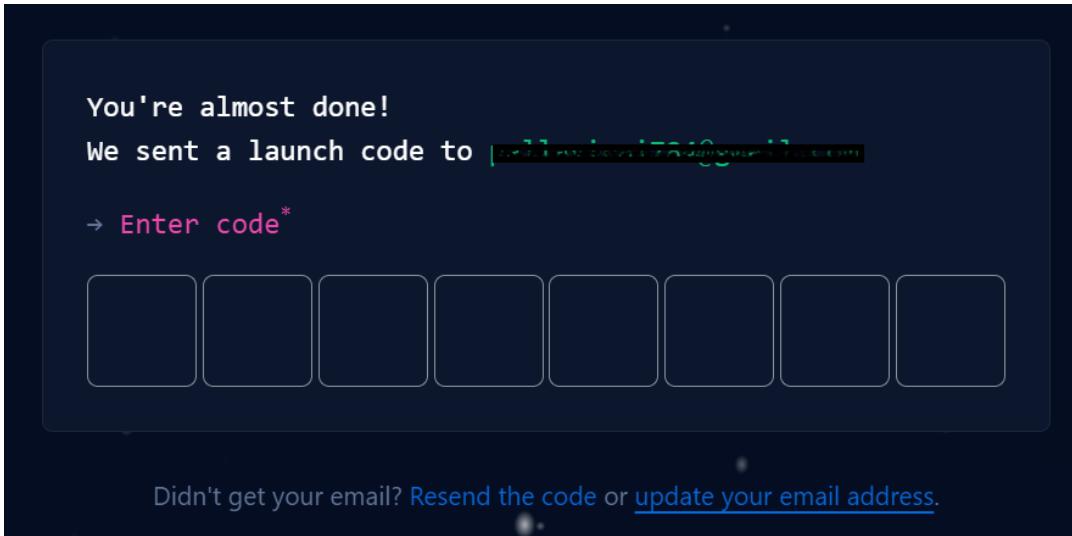




[Create account](#)

By creating an account, you agree to the [Terms of Service](#). For more information about GitHub's privacy practices, see the [GitHub Privacy Statement](#). We'll occasionally send you account-related emails.

5. You will receive a verification email from GitHub. Click the enclosed link to verify your email or enter the provided verification code. Note: If you do not receive a verification email, click [Resend the code](#).



6. After entering the provided verification code, you will see a screen that looks like this. This indicates that you are logged into your account and you are ready to start using it.

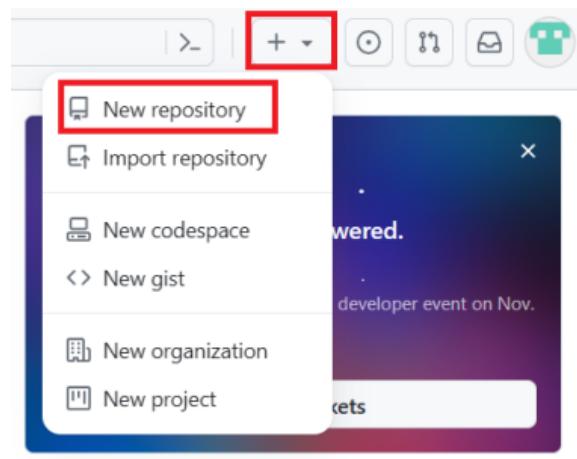
The GitHub dashboard for user 'UNIVERSE23' shows the following:

- Home:** Updates to your homepage feed. A message states: "We've combined the power of the Following feed with the For you feed so there's one place to discover content on GitHub. There's improved filtering so you can customize your feed exactly how you like it, and a shiny new visual design." Includes a "Learn more" button.
- Start writing code:** A section for creating a new repository. It asks "Start a new repository" and provides a text input field "shree1113 / name your new repository...". It offers two options: "Public" (Anyone on the internet can see this repository) and "Private" (You choose who can see and commit to this repository). A "Create a new repository" button is present.
- Recent activity:** A list of recent actions taken by the user.
- Create your first project:** A section encouraging users to "Ready to start building? Create a repository for a new idea or bring over an existing repository to keep contributing to it." Includes "Create repository" and "Import repository" buttons.
- Explore repositories:** A section for exploring repositories.
- Profile:** Shows the user's profile picture and name "UNIVERSE23". A message says "Get your AI questions answered. We know you have some." and a "Get free tickets" button.
- Latest changes:** A list of recent repository updates.

2: Add a project/repository

To add a new repository, complete the following steps:

- At the top right of the GitHub home page, click on the "+" icon and select **New repository**.



2. Enter a repository name and select the Add a README file check box under the Initialize this repository with: option.

Create a new repository

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

Required fields are marked with an asterisk (*).

Repository template

No template ▾

Start your repository with a template repository's contents.

Owner *



Repository name *

testrepo

testrepo is available.

Great repository names are short and memorable. Need inspiration? How about [silver-octo-computing-machine](#) ?

Description (optional)

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:

Add a README file

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

Add .gitignore

.gitignore template: None ▾

Initialize this repository with:

Add a README file

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

Add .gitignore

.gitignore template: None ▾

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

Choose a license

License: None ▾

A license tells others what they can and can't do with your code. [Learn more about licenses](#).

This will set main as the default branch. Change the default name in your [settings](#).

You are creating a public repository in your personal account

You are creating a public repository in your personal account.

Create repository

The repository is created and its home page is displayed.

testrepo Public

main 1 branch 0 tags

Go to file Add file Code About

Initial commit bd037ee now 1 commit

README.md Initial commit now

README.md

testrepo

No description, website, or topics provided.

Readme Activity 0 stars 0 watching 0 forks

Releases No releases published Create a new release

Packages No packages published Publish your first package

Next, you'll start editing the repository.

3: Create and edit a file

3.1 Edit a file

Although you will normally create a file before you edit it, in this case, the README.md file has already been created for you. To edit that file, complete the following steps:

1. Your repository root folder contains just one file: README.md. Click the pencil icon at the right to edit the file.

testrepo Public

main 1 branch 0 tags

Go to file Add file Code

Initial commit 729712b now 1 commit

README.md Initial commit now

README.md

testrepo

2. Add 'It's a markdown file in this repository' text to the file and go to top right and click Commit changes

Code Issues Pull requests Zenhub Actions Projects Wiki Security Insights Settings

testrepo / README.md in main

Cancel changes Commit changes...

Edit Preview Code 55% faster with GitHub Copilot

Spaces 2 Soft wrap

```
1 # testrepo
2
3 ## Editing the file
4
5 Its a markdown file in this repository
```

3. Add some additional description and click Commit changes.

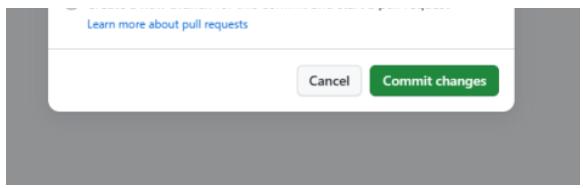
Commit changes

Commit message Update README.md

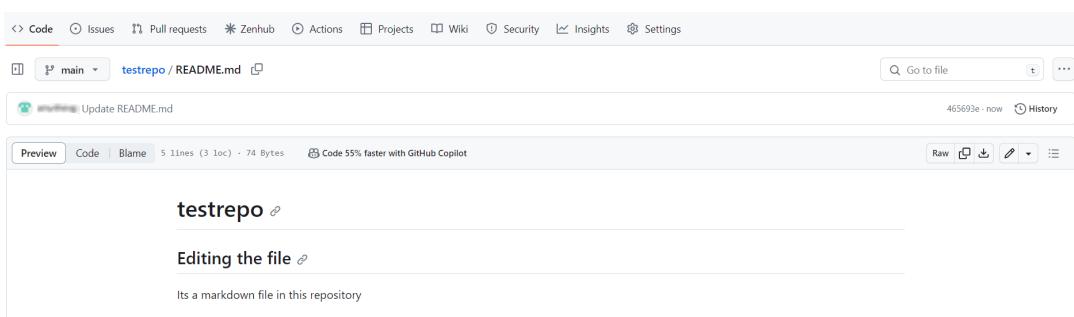
Extended description Add an optional extended description..

Commit directly to the main branch
 Create a new branch for this commit and start a pull request

4. Confirm that the test you added to the file has been saved.

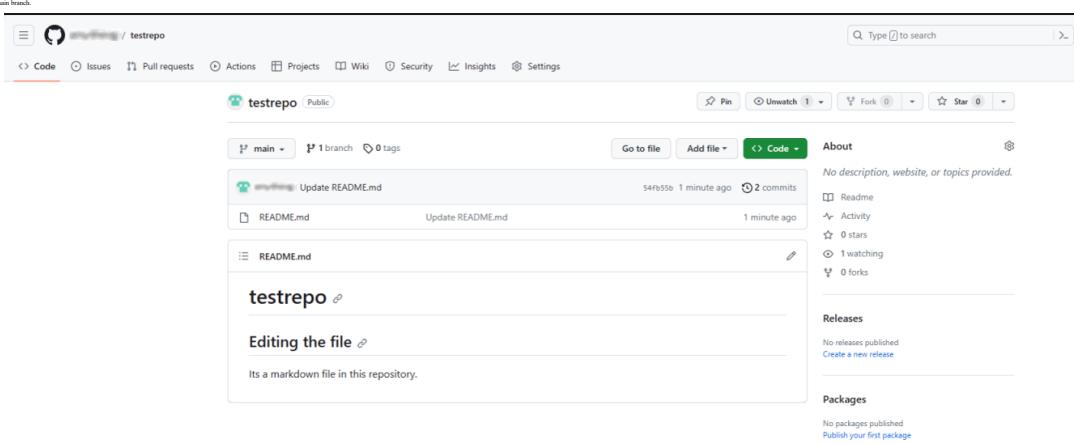


4. Click on the repository name `testrepo` to go back to the main branch.

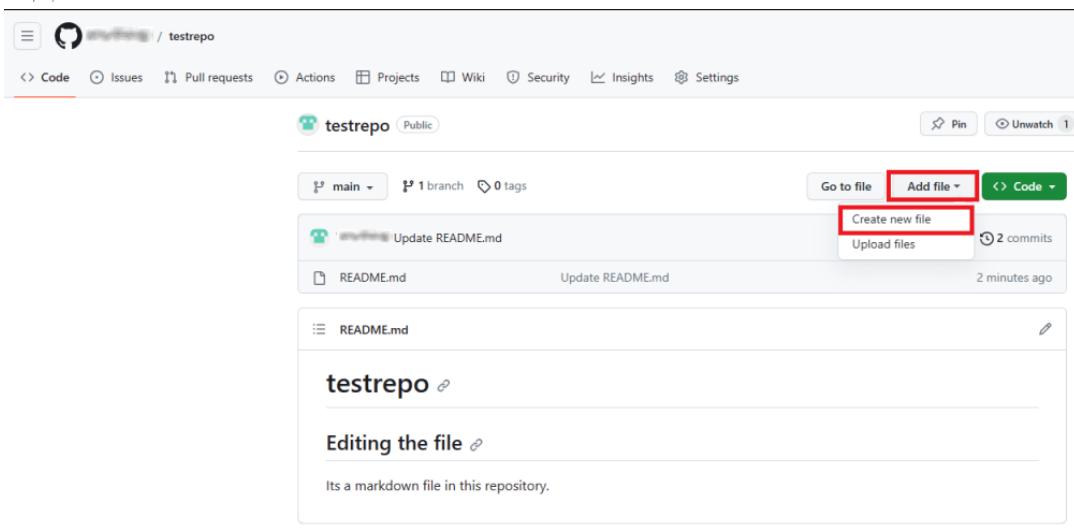


3.2 Create a new file

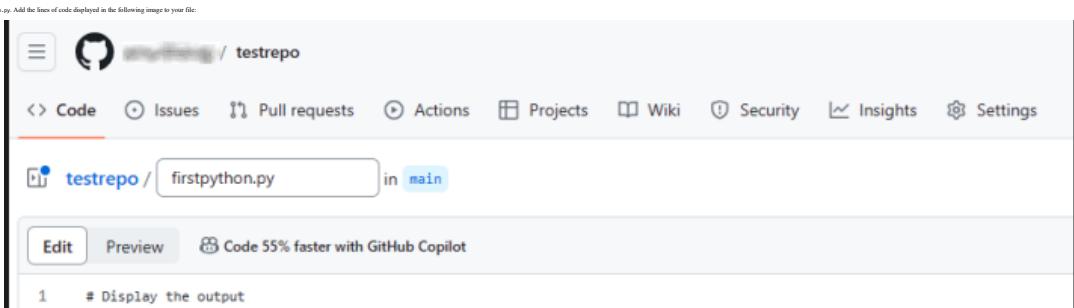
1. Click on the repository name `testrepo` to go back to the main branch.



2. Click `Add file` and select `Create new file` to create a new file in the repository.



3. Enter a file name and extension; for example, `firstpython.py`. Add the lines of code displayed in the following image to your file:



4. Scroll to the top right of the page and click Commit changes. You can optionally add a description of your update (for example, "Adding a new file"). Click Commit changes to create your new file.

The screenshot shows a GitHub commit dialog. The commit message is "Create firstpython.py" and the extended description is "Adding a new file". The "Commit directly to the main branch" radio button is selected. At the bottom right, the "Commit changes" button is highlighted with a red box.

5. Your file is now added to your repository and the repository listing shows when the file was added or last revised.

The screenshot shows the GitHub repository listing for "testrepo". It contains two files: "README.md" (initial commit, 21 minutes ago) and "firstpython.py" (Create firstpython.py, 3 minutes ago). The repository name "testrepo" is at the bottom.

4. Upload and commit a file

To upload a local file and commit it to your repository, complete the following steps:

1. On your repository page, click Add file and then select Upload files to upload a file.

The screenshot shows the GitHub repository page for "testrepo". The "Add file" button is highlighted with a red box. The commit history shows two commits: "Initial commit" (README.md) and "Create firstpython.py" (firstpython.py). The repository details on the right show 0 stars, 1 watching, and 0 forks.

2. Click choose your files and choose a file from your computer. You can upload any file (for example, a .txt, .ipynb, or .png file) to the repository.

The screenshot shows the GitHub repository page for "testrepo". A large box on the right is labeled "Drag files here to add them to your repository" and "Or choose your files".

3. When the file finishes uploading, click Commit changes.

The screenshot shows a GitHub commit dialog. The file "test.py.txt" is listed. The "Commit changes" button is highlighted with a red box.

Your file is uploaded to the repository.

Commit directly to the `main` branch.
 Create a new branch for this commit and start a pull request. [Learn more about pull requests.](#)

Commit changes **Cancel**

testrepo Public Pin Unwatch 1

Code main 1 branch 0 tags Go to file Add file

File	Action	Time	Commits
<code>README.md</code>	Update <code>README.md</code>	29 minutes ago	c59a98f now 4 commits
<code>firstpython.py</code>	Create <code>firstpython.py</code>	6 minutes ago	
<code>test.py.txt</code>	Add files via upload	now	

Summary

Congratulations! In this lab, you have learned how to create a new repository, add a new file, edit a file, upload a file, and commit your changes. We encourage you to continue to update your repository to become familiar with the processes that you have learned.

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