Introduction to Repositories

Let's review:

- What is a repository?
- How to create a repository
- Adding files to a repository
- How to search for repositories
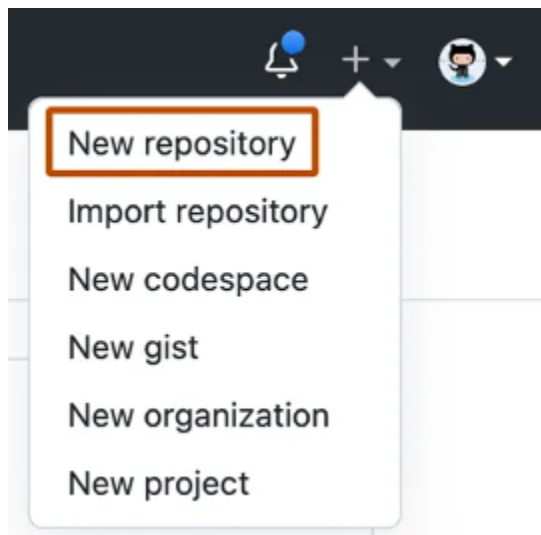- Introduction to gists, wikis, and GitHub Pages

What is a Repository?

A repository contains all of your project's files and each file's revision history. It's one of the essential parts that helps you collaborate with people. You can use repositories to manage your work, track changes, store revision history, and work with others. Before we dive too deep, let's first start with how to create a repository.
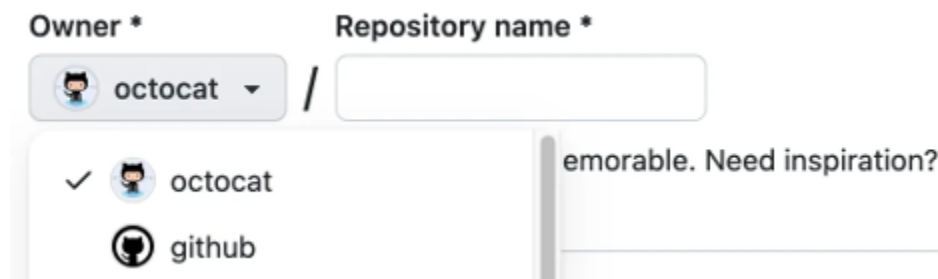
How to Create a Repository

You can create a new repository on your personal account or any organization where you have sufficient permissions.

Creating a repository from github.com.

1. In the upper-right corner of any page, use the drop-down menu, and select **New repository**.

2. Use the **Owner** drop-down menu to select the account you want to own the repository.
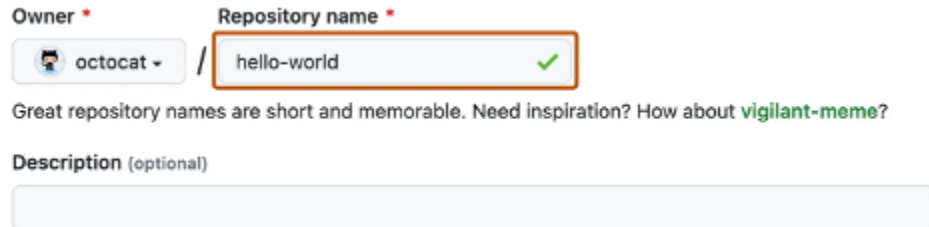

3. Type a name for your repository, and an optional description.

4. Choose a repository visibility:
   - **Public** repositories are accessible to everyone on the internet.
   - **Private** repositories are only accessible to you, people you explicitly share access with, and, for organization repositories, certain organization members.

5. Select **Create repository** and congratulations! You just created a repository!

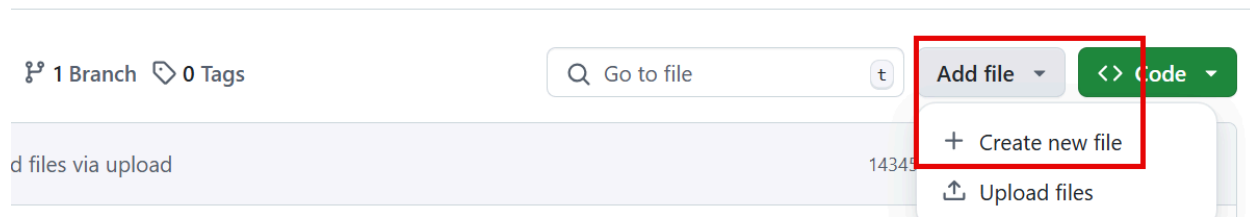Next, let's add files to your repository.

How to add a file to your repository

Files in GitHub can do a handful of things, but the main purpose of files is to store data and information about your project. It's worth knowing that in order to add a file to a repository, you must first have at least **Write** access within the repository you want to add a file to.

1. On GitHub.com, navigate to the main page of the repository.

2. In your repository, browse to the folder where you want to create a file. You can either select the **Create new file** link or **upload an existing file**.
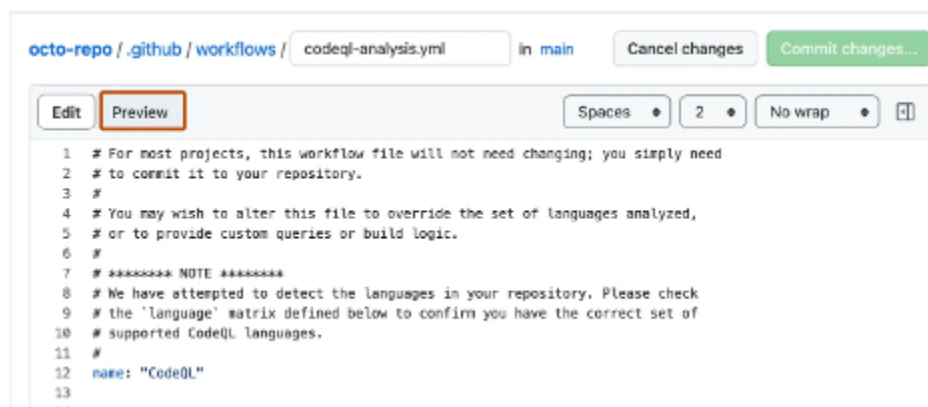
3. Once added, above the list of files, select the **Add file** drop-down menu. Then select **Create new file**.

4. In the file name field, type the name and extension for the file. To create subdirectories, type the `/` directory separator.

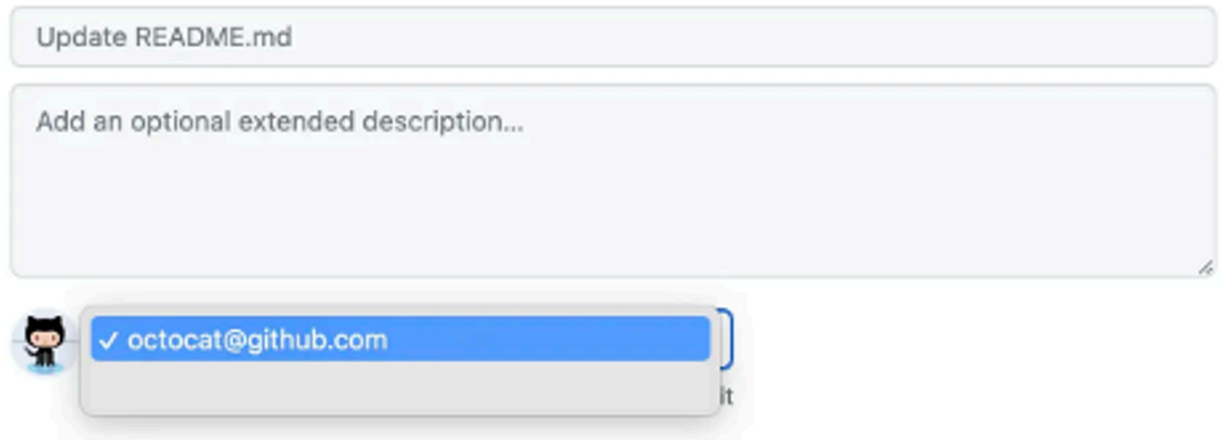5. In the file contents text box, type the **content** for the file.

6. To review the new content, above the file contents, select **Preview**.

7. Select **Commit changes**.

8. In the **Commit message** field, type a short and meaningful commit message that describes the change you made to the file. You can attribute the commit to more than one author in the commit message.

9. If you have more than one email address associated with your account on GitHub.com, select the email address drop-down menu. Then select the email address to use as the Git author email address. Only verified email addresses appear in this drop-down menu. If you enabled email address privacy, then `[username]@users.noreply.github.com` is the default commit author email address.

10. Below the **Commit** message fields, decide whether to add your commit to the current branch or to a new branch. If your current branch is the default branch, you should choose to create a new branch for your commit, and then create a pull request.

11. Select **Commit changes** or **Propose changes**.

Congratulations, you just created a new file in your repository! You have also created a new branch and made a commit.