Hands-on Lab: Getting Started with GitHub



Effort: 20 min

In this lab, you will get started with GitHub by creating a GitHub account and project and adding a file to it using its Web interface.

Objectives

After completing this lab, you will be able to:

- 1. Describe GitHub
- 2. Create a GitHub account
- 3. Add a project and repo
- 4. Edit and create a file
- 5. Upload a file and Commit

GitHub Overview

First, let us introduce you to GitHub. GitHub is a collection of folders and files. It is a Git repository hosting service, but it adds many of its own features. Git is a command-line tool. It hosts and maintains a server via command line. GitHub provides this Git server and a Web-based graphical interface for you. It also provides access control and collaboration features, such as wikis and basic task management tools for every project. In addition, 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 hosting open source projects.

Exercise 1: Creating a GitHub Account

Please use the following steps to create an account on GitHub:

Step 1: Create an account: https://github.com/join

NOTE: If you already have a GitHub account, you can skip this step and simply log in to your account.

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

Click Create account.

Step 3: Click Verify to verify the account and click Done.

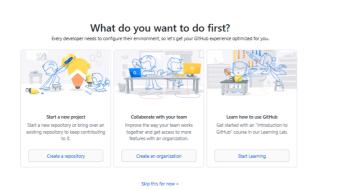
Step 4: After verification, click Join a Free Plan.

Step 5: Select the details as shown below and click Complete setup.

Step 6: Go to your email, find the verification email from GitHub, and click the Verify your email button or link in that email to verify.

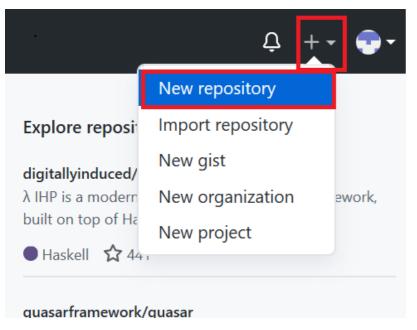
 $\begin{tabular}{ll} \textbf{NOTE:} If you do not receive the verification email, click Resent verification email. \end{tabular}$

Email is verified.

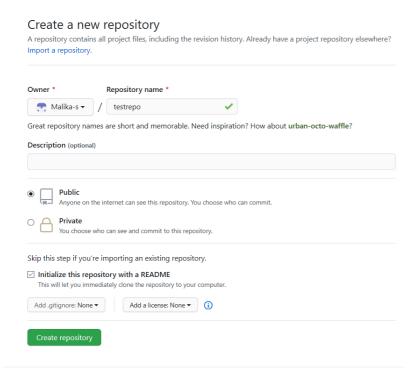


Exercise 2: Adding a project and repo

Step 1: Click the + symbol and click New repository.



Step 2: Provide a name for the repository and initialize it with the empty ${\tt README.md}$ file.



Click Create repository.

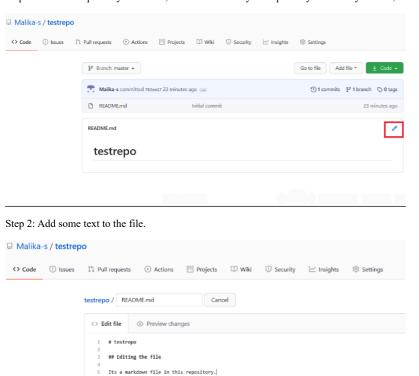
Now, you will be redirected to the repository you have created.

Let's start editing the repository.

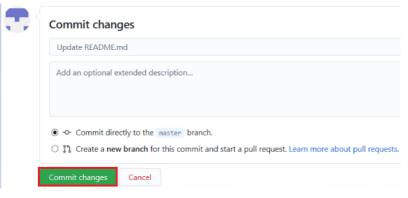
Exercise 3: Create and edit a file

Exercise 3a: Edit a file

Step 1: Once the repository is created, the root folder of your repository is listed by default, and has just one file, ReadMe.md. Click the pencil icon to edit the file.



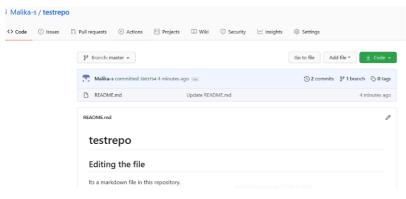
Step 3: Scroll down the page after adding the text and click Commit Changes.



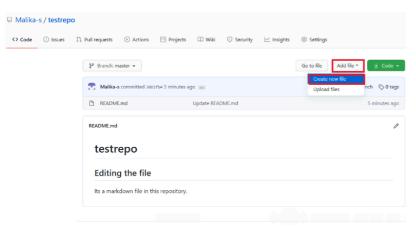
Now, check that your file is edited with the new text.

Exercise 3b: Create a new file

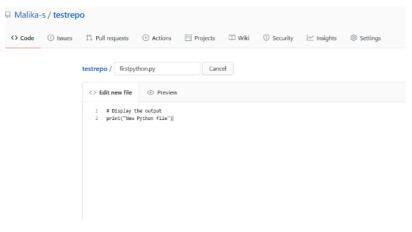
Step 1: Click the repository name to return to the master branch, like in this testrepo.



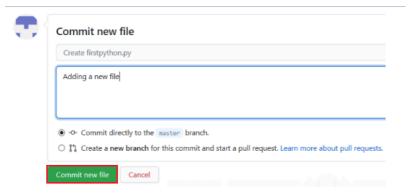
Step 2: Click Add file and select Create New file to create a file in the repository.



Step 3: Provide the file name and the extension of the file. For example, firstpython.py and add the lines.



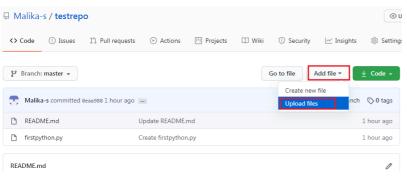
Step 4: Scroll down the page after adding the text. Add description of the file (optional) and click Commit new file.



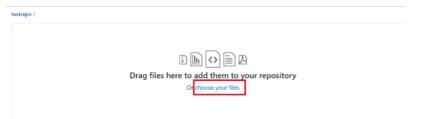
Step 5: Your file is now added to your repository, and the repository listing shows when the file was added and changed.

Exercise 4: Upload a file & Commit

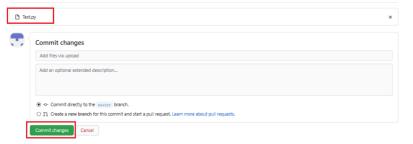
Step 1: Click Add file and select Upload files to upload a file (any .txt, .ipynb, .png file) in the repository from the local computer.



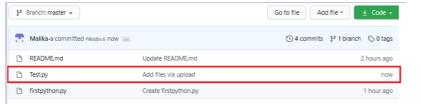
Step 2: Click choose your files and select any files from your computer.



Step 3: Once the file finishes uploading, click Commit changes.



Step 4: Now, your file is uploaded in the repository.



Summary

In this document, you have learned how to create a new repository, add a new file, edit a file, upload a file in a repository, and commit the changes.

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Changelog

Date Version	Changed by	Change Description
2023-01-17 0.6	Steve Hord	QA pass with edits
2020-07-16 0.5	Malika Singla	Spell check, step number added
2020-07-14 0.4	Rav Ahuja	Changed logo, updated effort, title, intro, objectives, added Authors and Changelog
2020-07-13 0.3	Malika Singla	Added to GitLab and made some formatting changes, added objectives, etc.
2020-07-03 0.2	Malika Singla	Ported to markdown and added GitHub account signup, new screenshots, etc.
2020-06-30 0.1	Romeo Kienzle	r Drafted initial version

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