

Jump Start

Overview

- ❖ We can either use the command line or a graphical tool, such as EGit for the Eclipse IDE or the GitHub client when using GitHub servers.

File States

- ❖ Each and every file in a working tree can be in one of the following states: untracked, dirty, staged and tracked.
- ❖ When the file is not tracked by the Git repository it means that it was neither staged (added to the staging area) nor committed and we don't track it.
- ❖ The file is considered to be dirty when it was changed but we still haven't added it to the staging area.

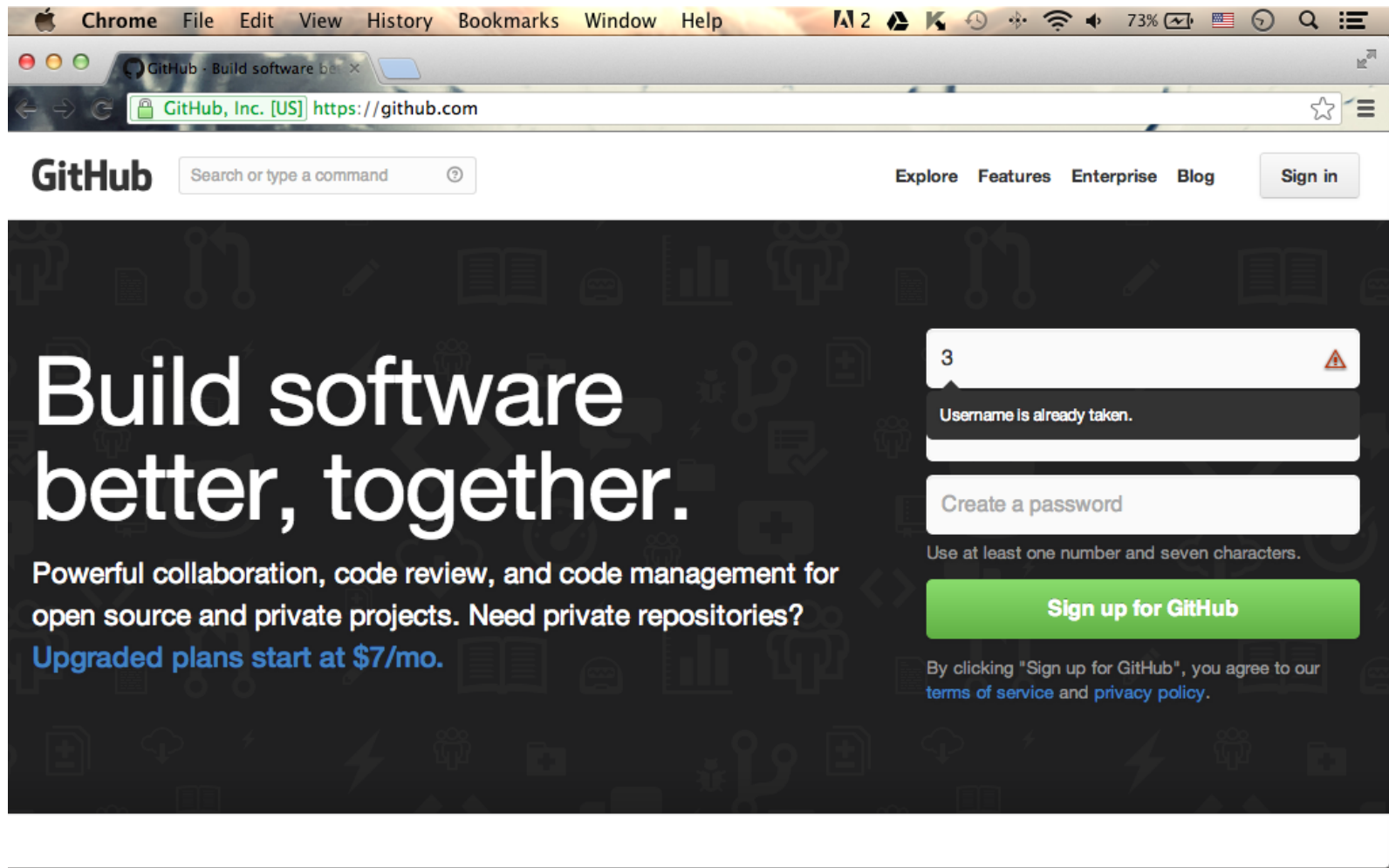
File States

- ❖ When the file is added to the staging area in order to be included in the next commit we consider it as a staged file.
- ❖ When the file was committed and is no longer in the staging area we consider it to be tracked.

The Github Repository

- ❖ The Github repository at www.github.org allows us to collaborate our code and manage its versions history.

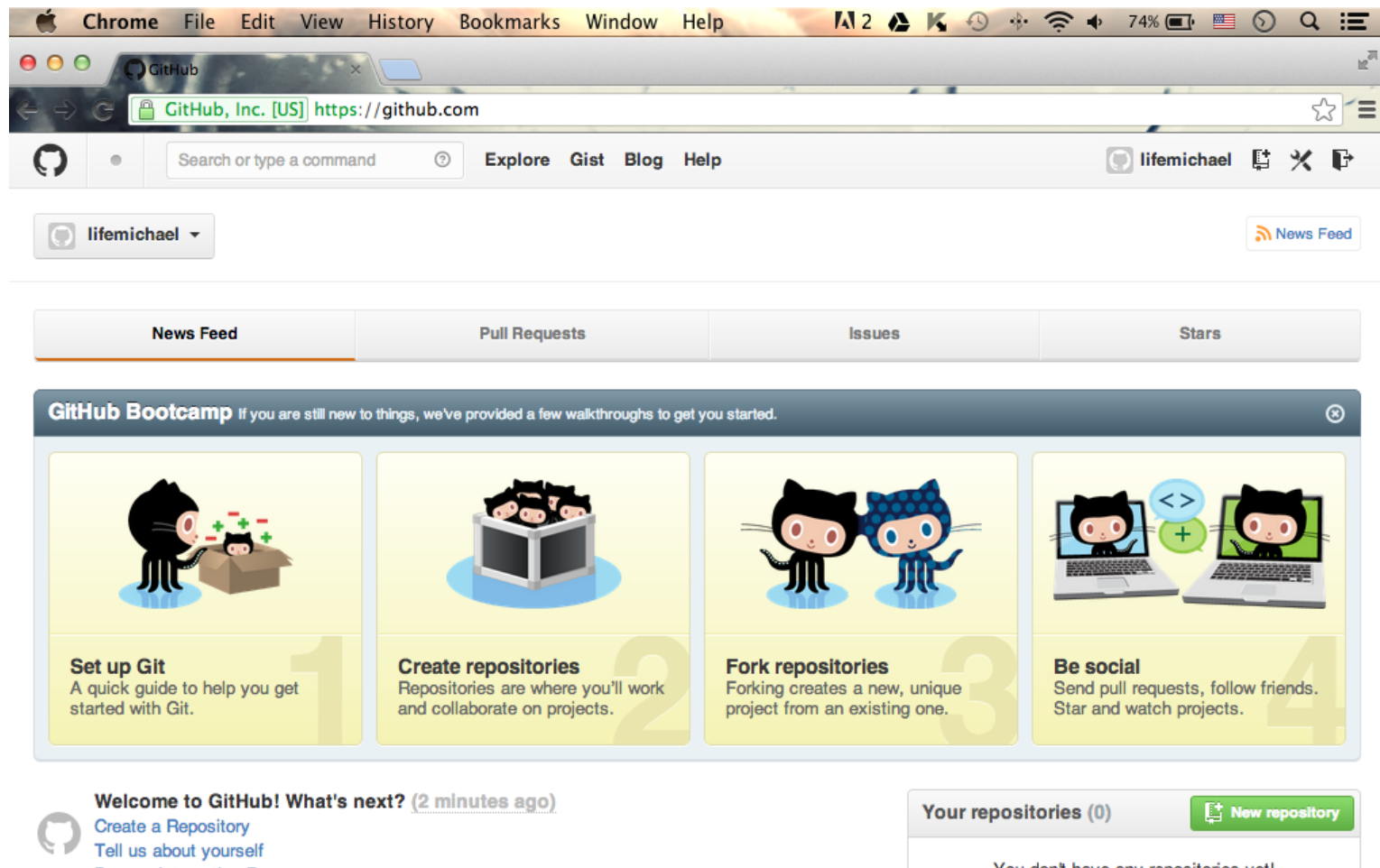
The Github Repository



The Github Repository

- ❖ When dealing with an open source project you can open an account for free.

The Github Repository



Using GitHub Client

- ❖ The simplest way to start using GitHub would be installing a GitHub client on our computer and start using it with the GitHub website.

Using GitHub Client

- ❖ GitHub has a client application with a friendly user interface developed specifically for different operating systems.

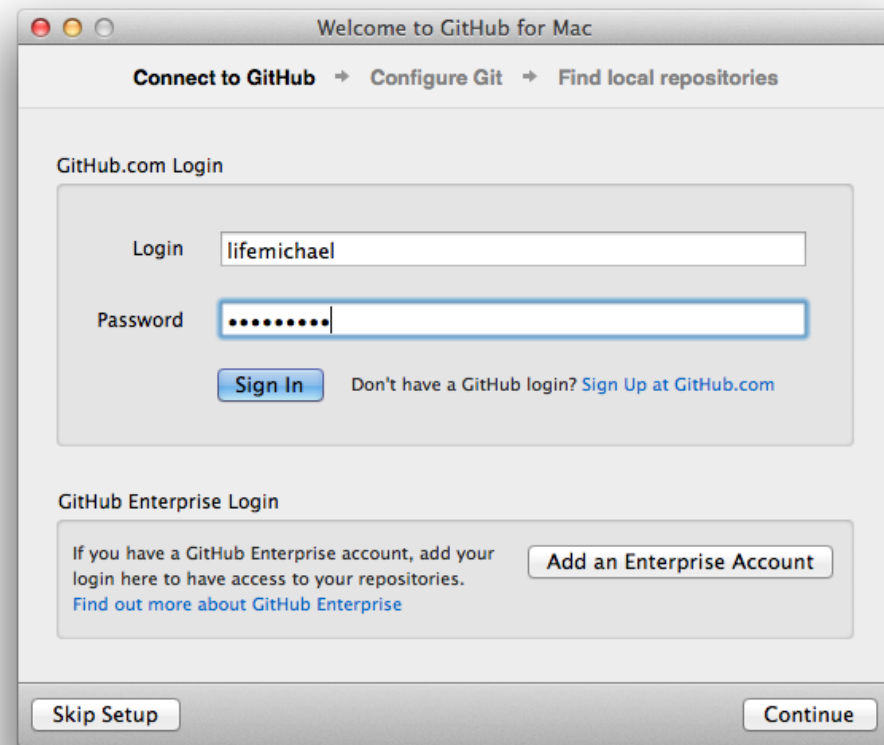
Using GitHub Client

The GitHub client application should First be Configured. Use The Setup Wizard in order to Set it Up!



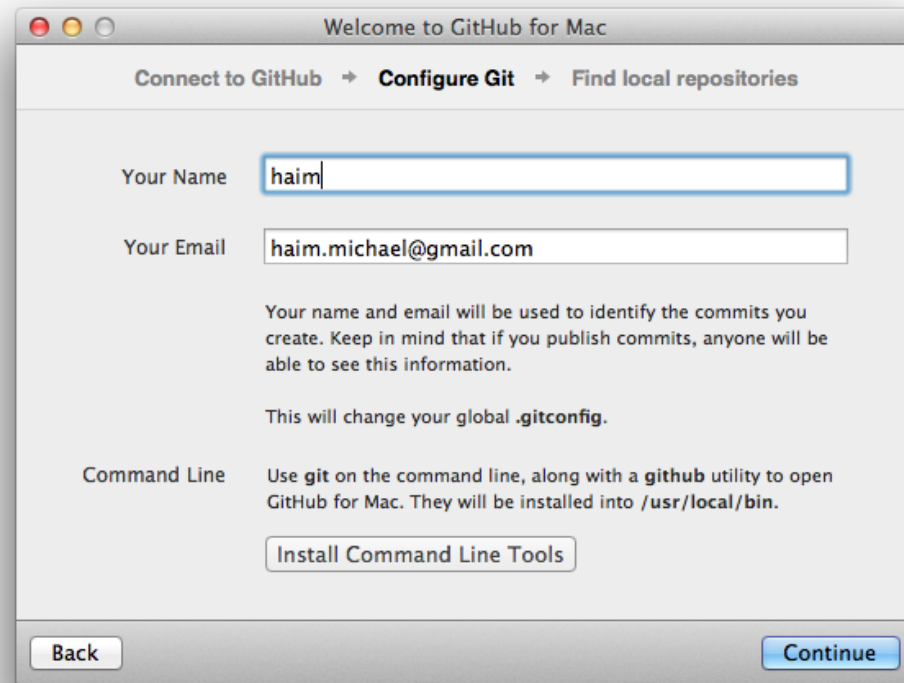
Using GitHub Client

The First Step Would Be Accessing
Your GitHub Account!



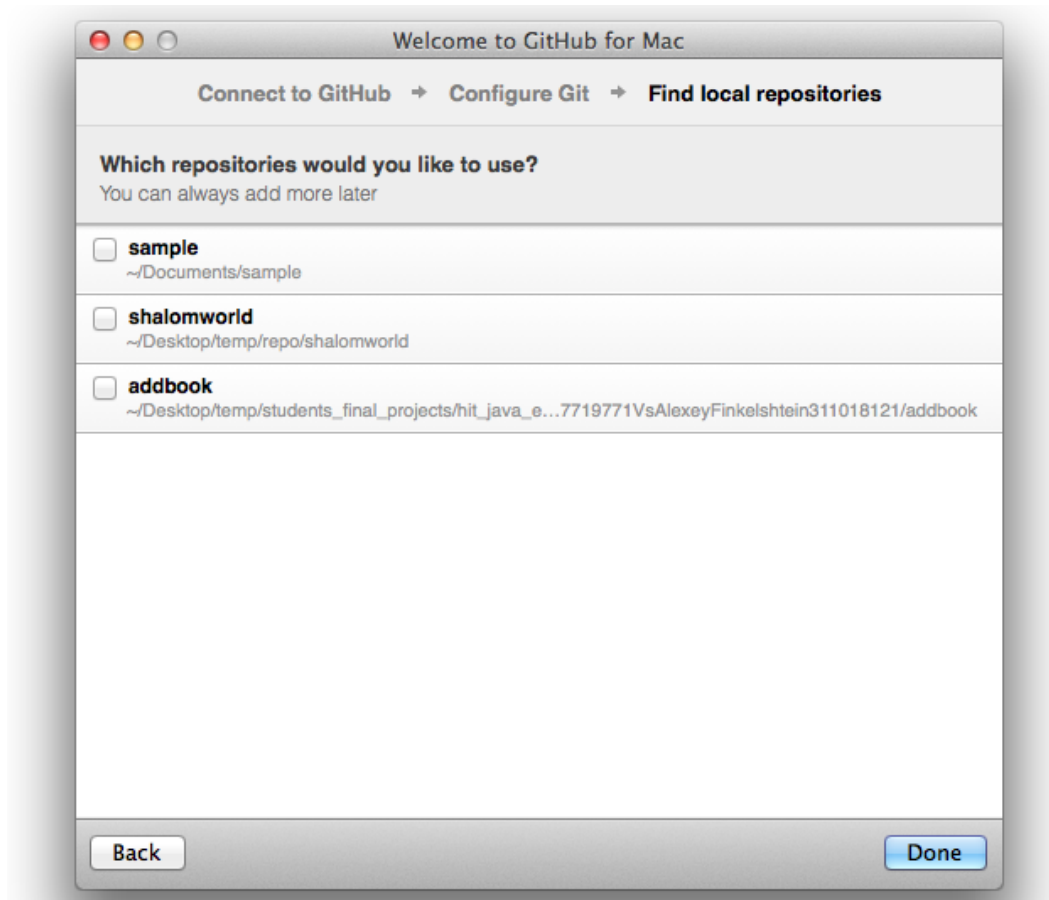
Using GitHub Client

Specify Your Name and Email Address. These Two Details Will Identify Your Commits!



Using GitHub Client

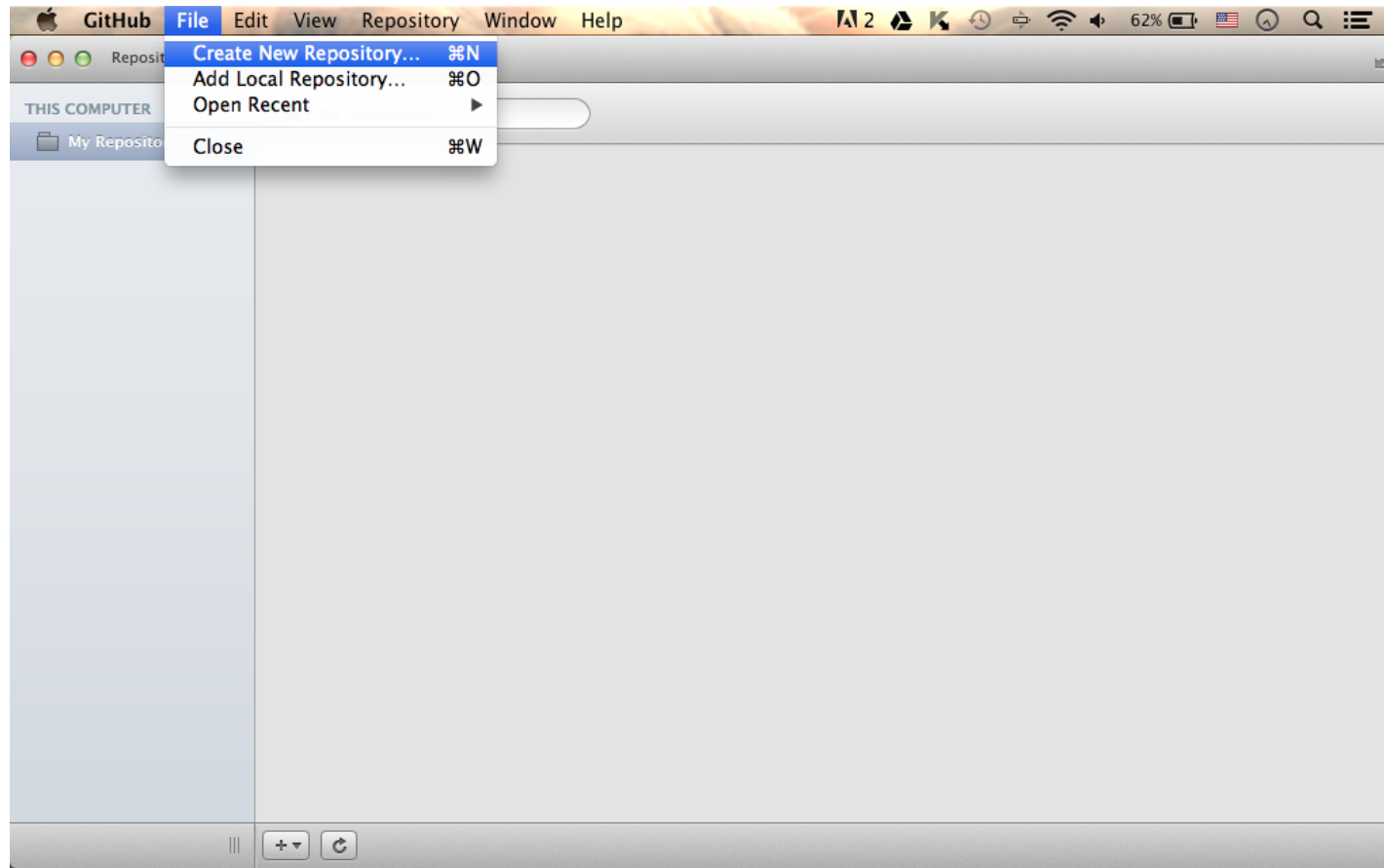
The Configuration Setup
Can Find Local Repositories —
You Already Have!.



Using GitHub Client

- ❖ Once the GitHub client was installed we can start using it in order to maintain your project files on GitHub web site.

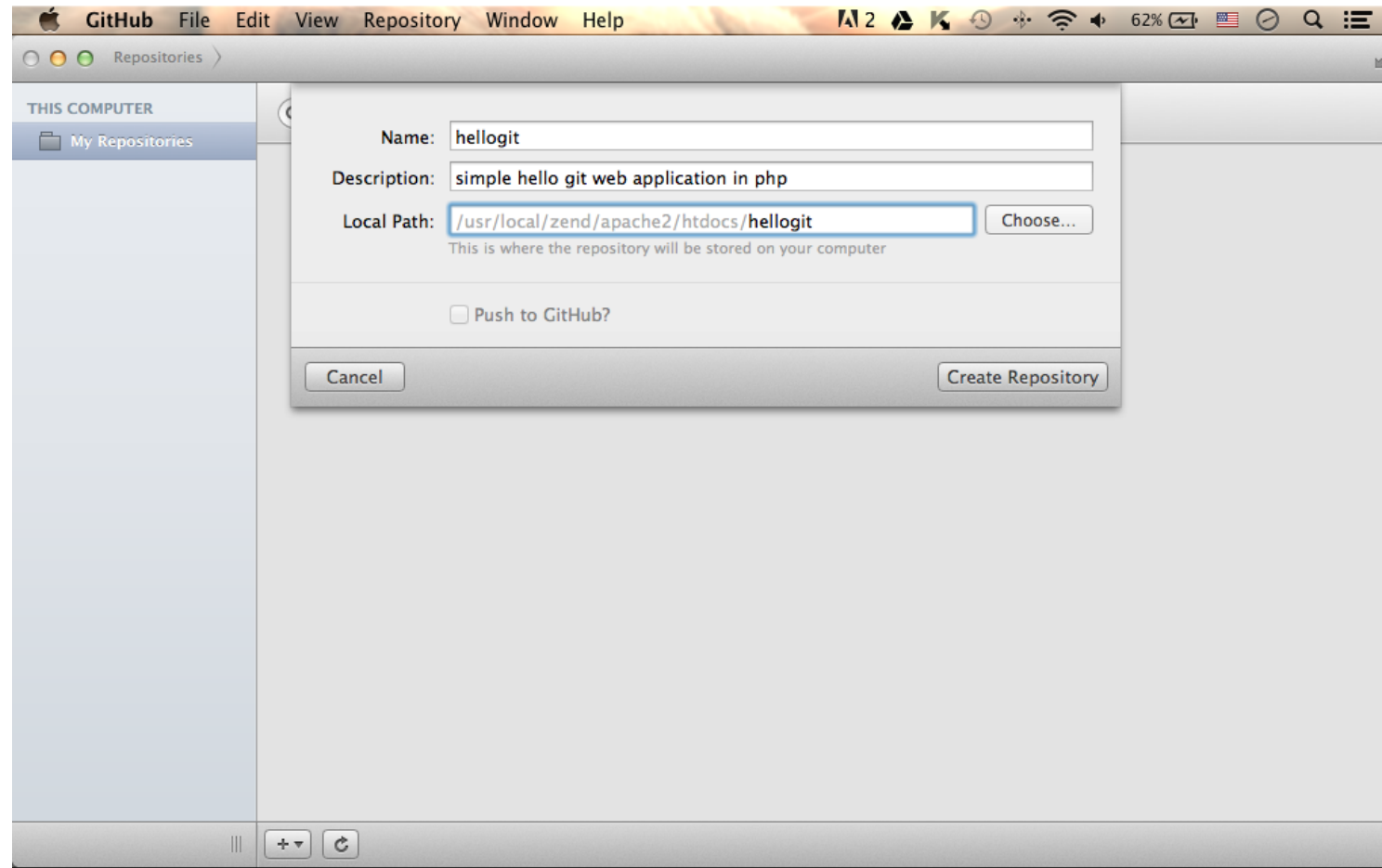
Using GitHub Client



Using GitHub Client

- ❖ The first step would be to create a new repository. You should select the folder on your computer that you want to be used as your repository.

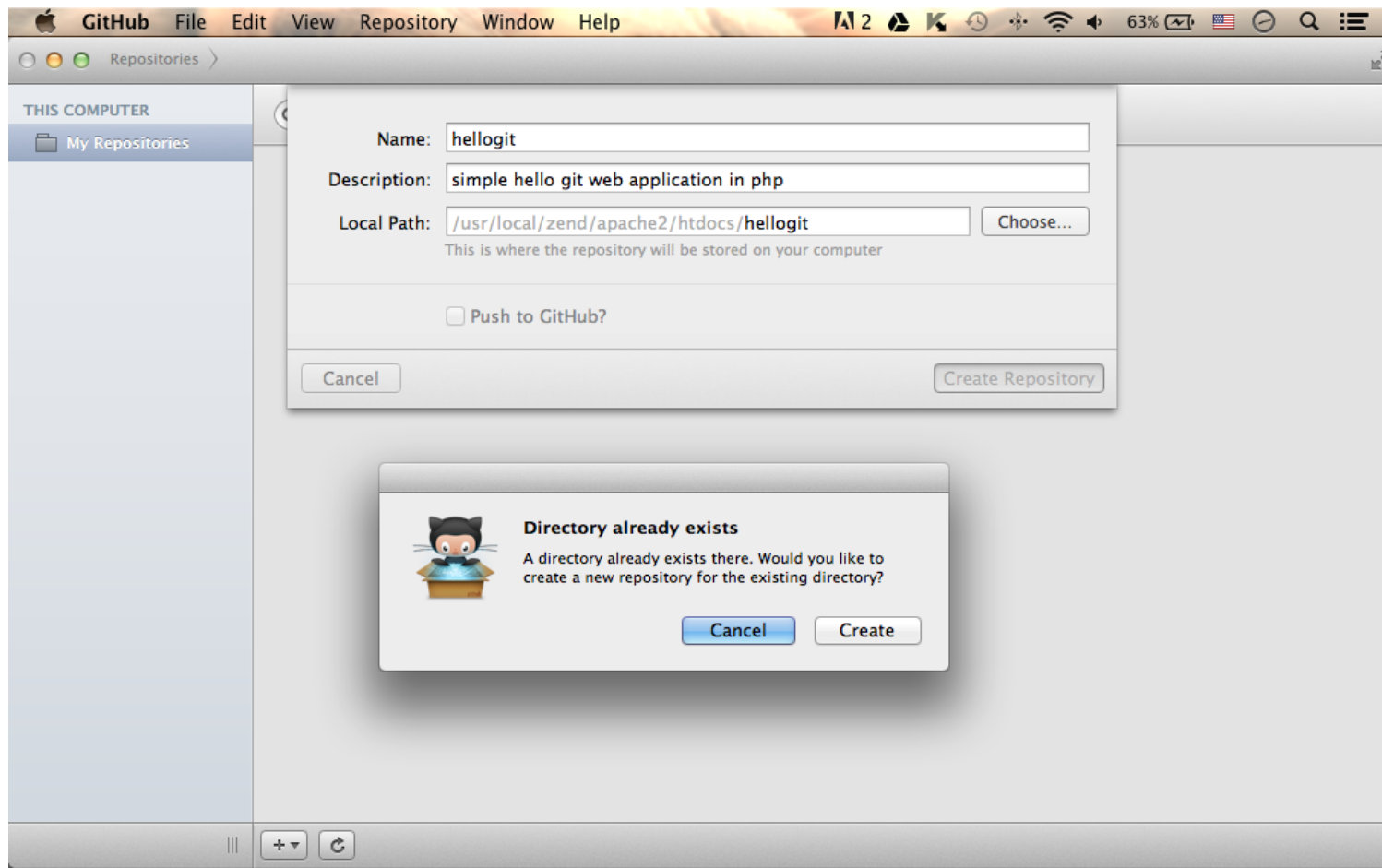
Using GitHub Client



Using GitHub Client

- ❖ If you select a directory that already exists you will be asked to approve the creation of a new repository for an existing directory.

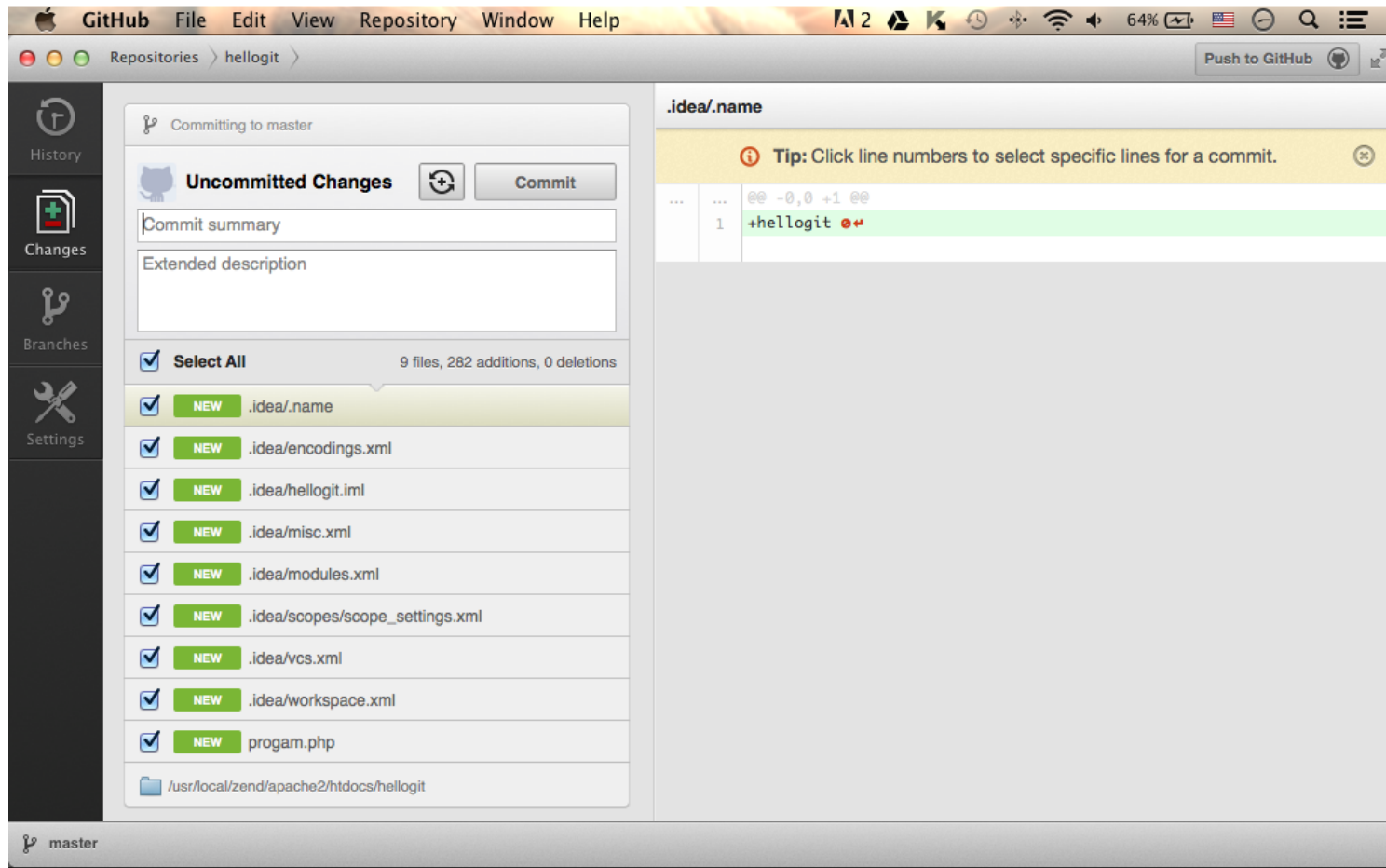
Using GitHub Client



Using GitHub Client

- ❖ The next screen you get will be the main screen of the GitHub client application.

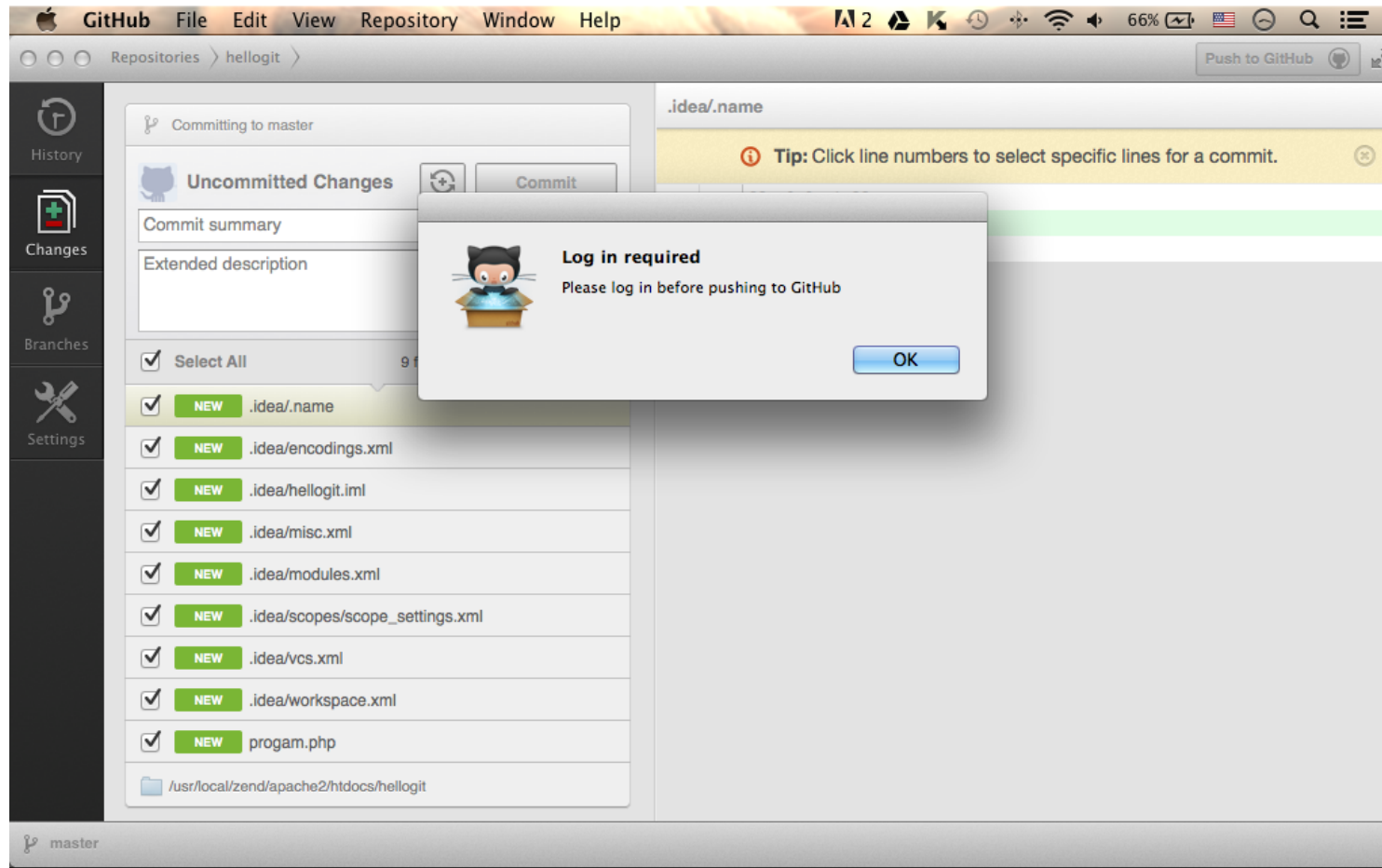
Using GitHub Client



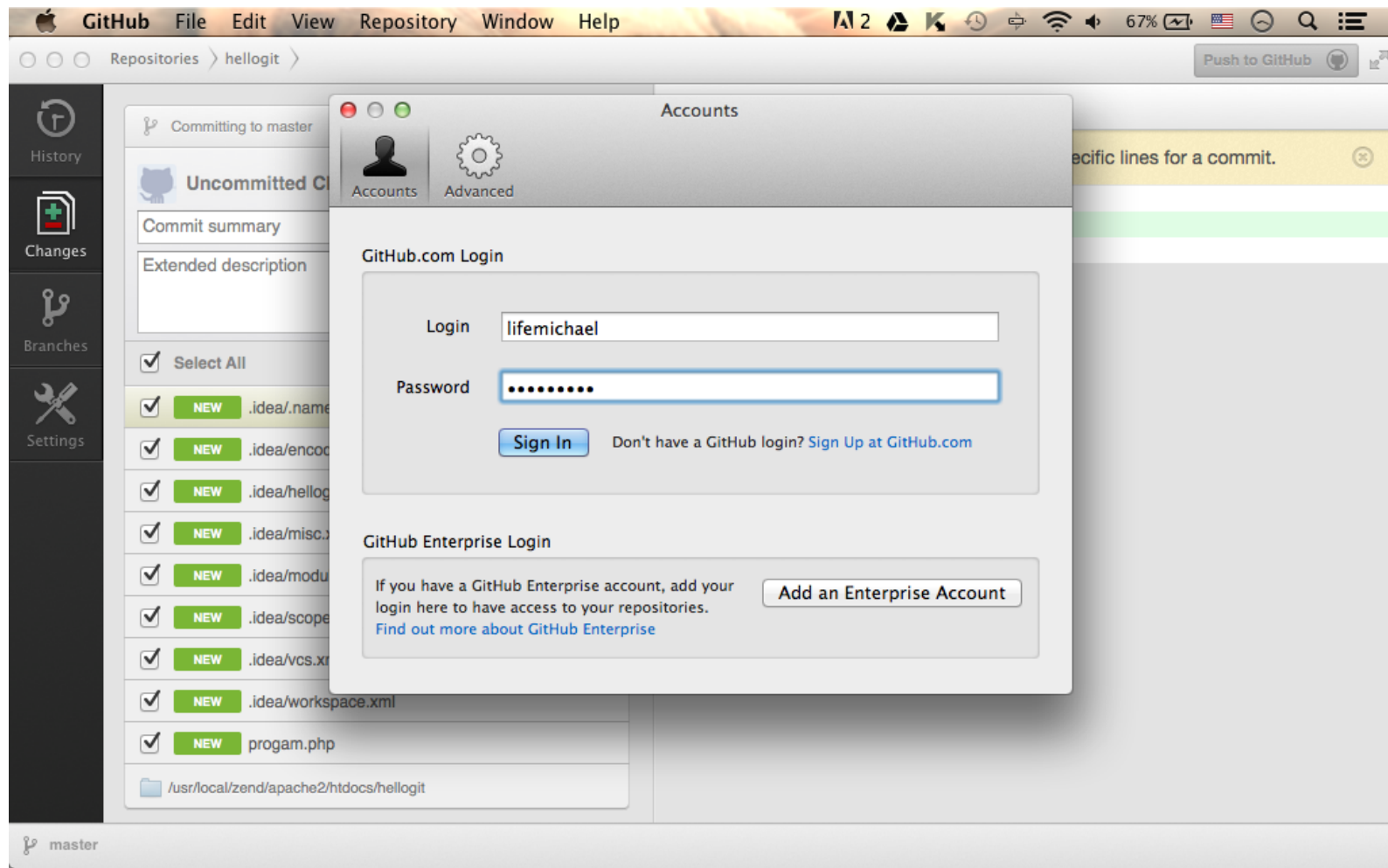
Using GitHub Client

- ❖ You can now press the Push on Github button on top in order to push the folder to the server side.
- ❖ Most likely that you will be asked to login into the GitHub account you are working with.

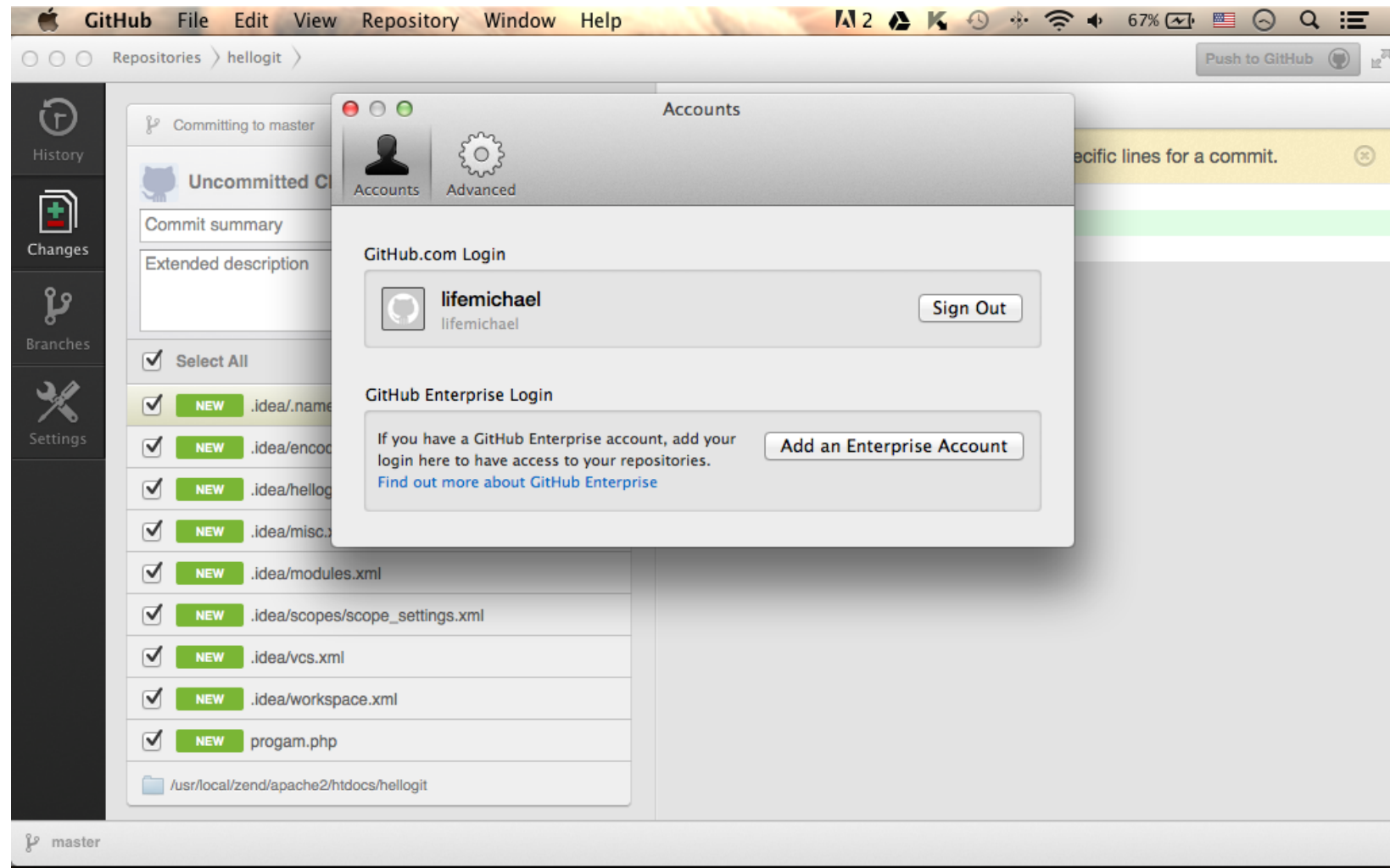
Using GitHub Client



Using GitHub Client



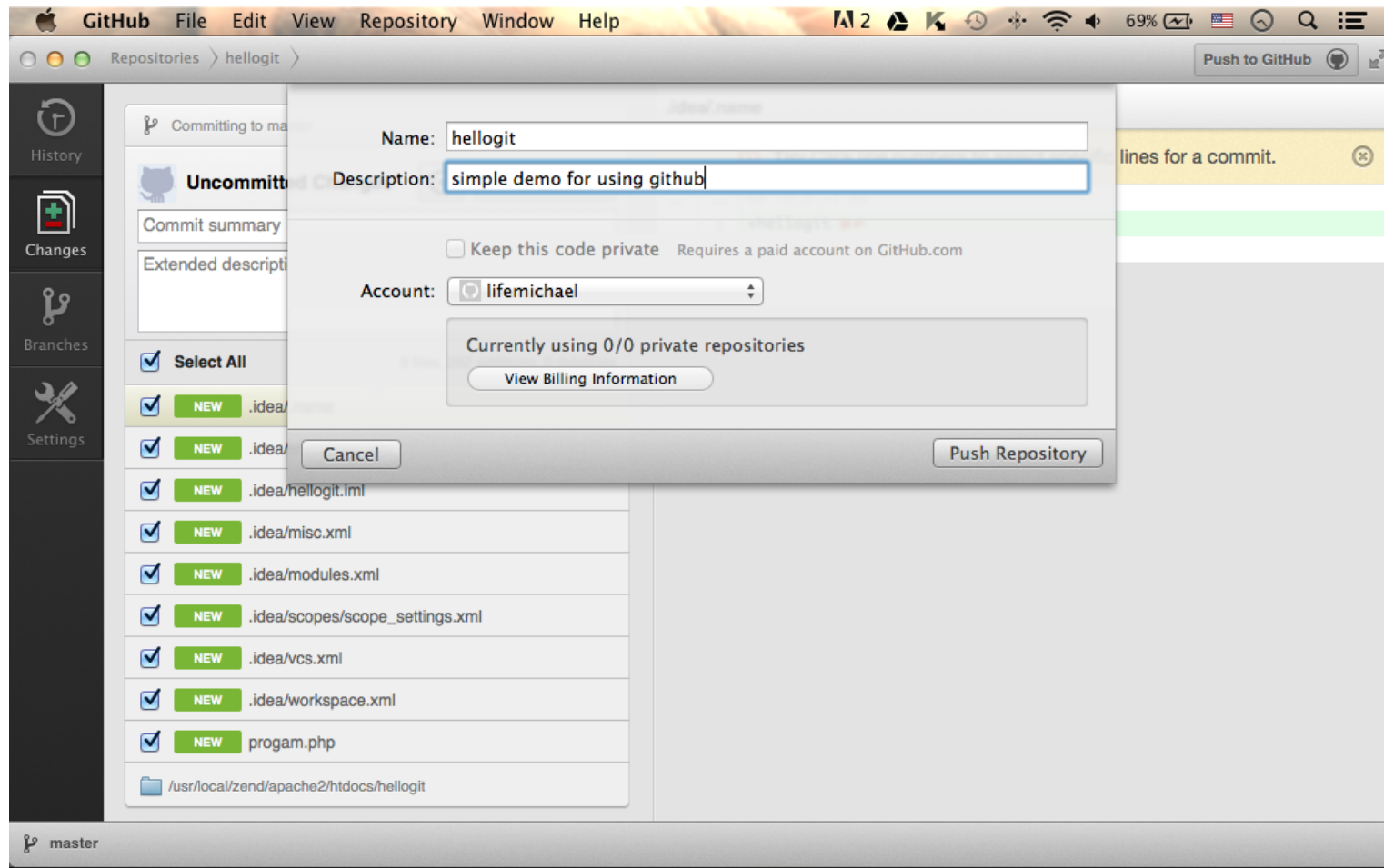
Using GitHub Client



Using GitHub Client

- ❖ Now that you are logged-in you can press the Push to GitHub button on top right in order to push the files in your local repository to the GitHub server.

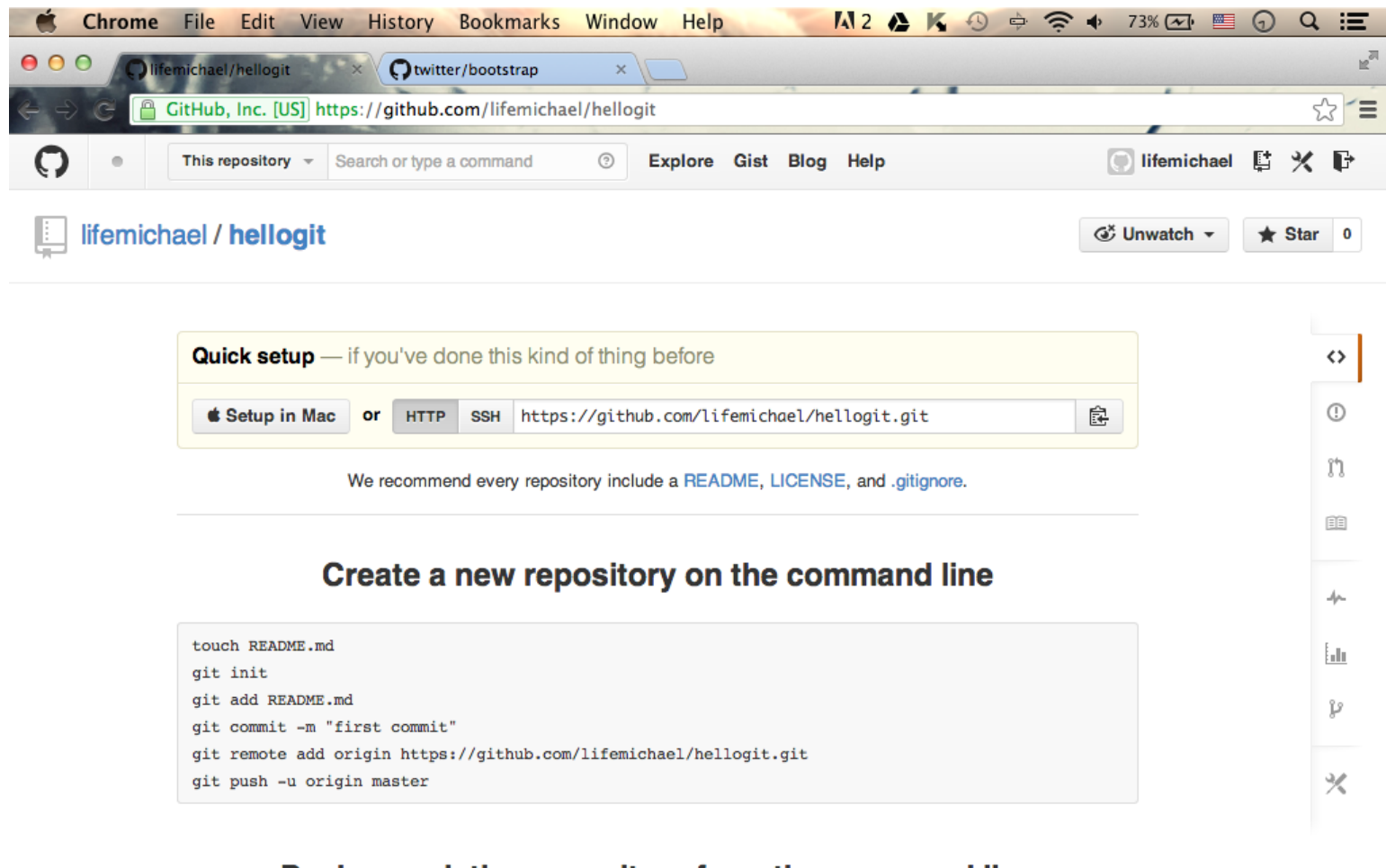
Using GitHub Client



Using GitHub Client

- ❖ If we now check the GitHub server we will find our small project available for access via the GitHub website.

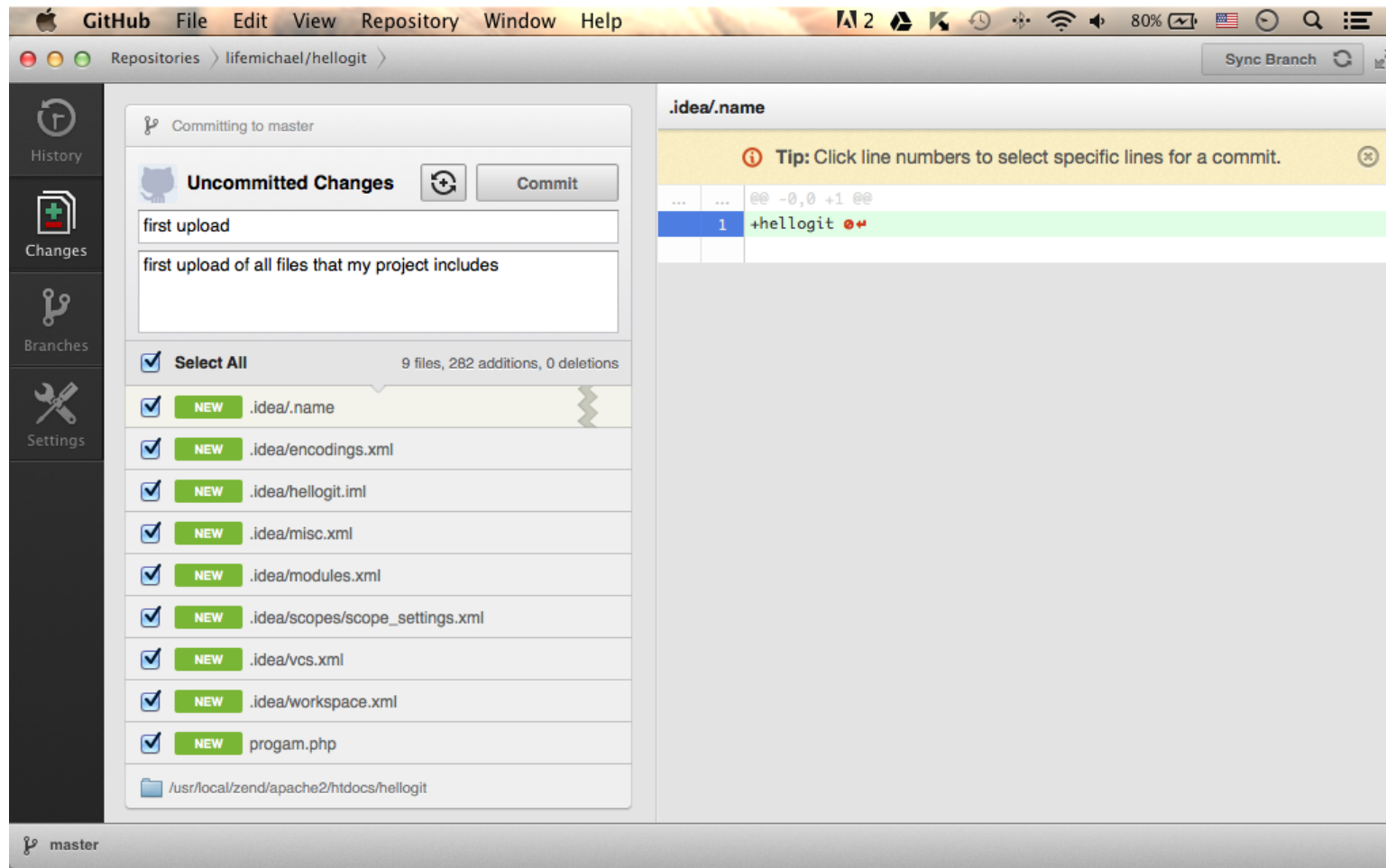
Using GitHub Client



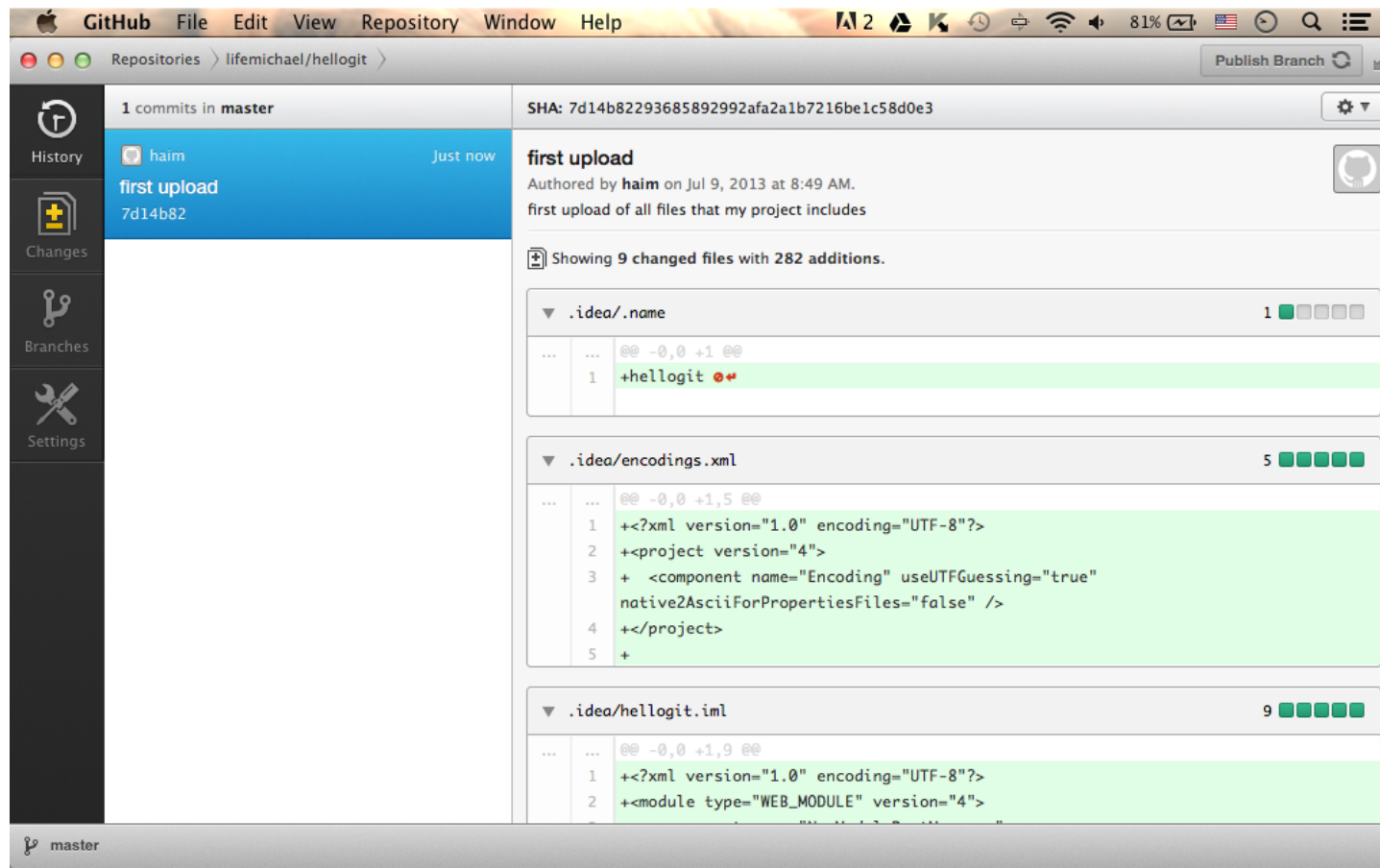
Using GitHub Client

- ❖ We can now commit changes in our local repository to be reflected on GitHub server.

Using GitHub Client



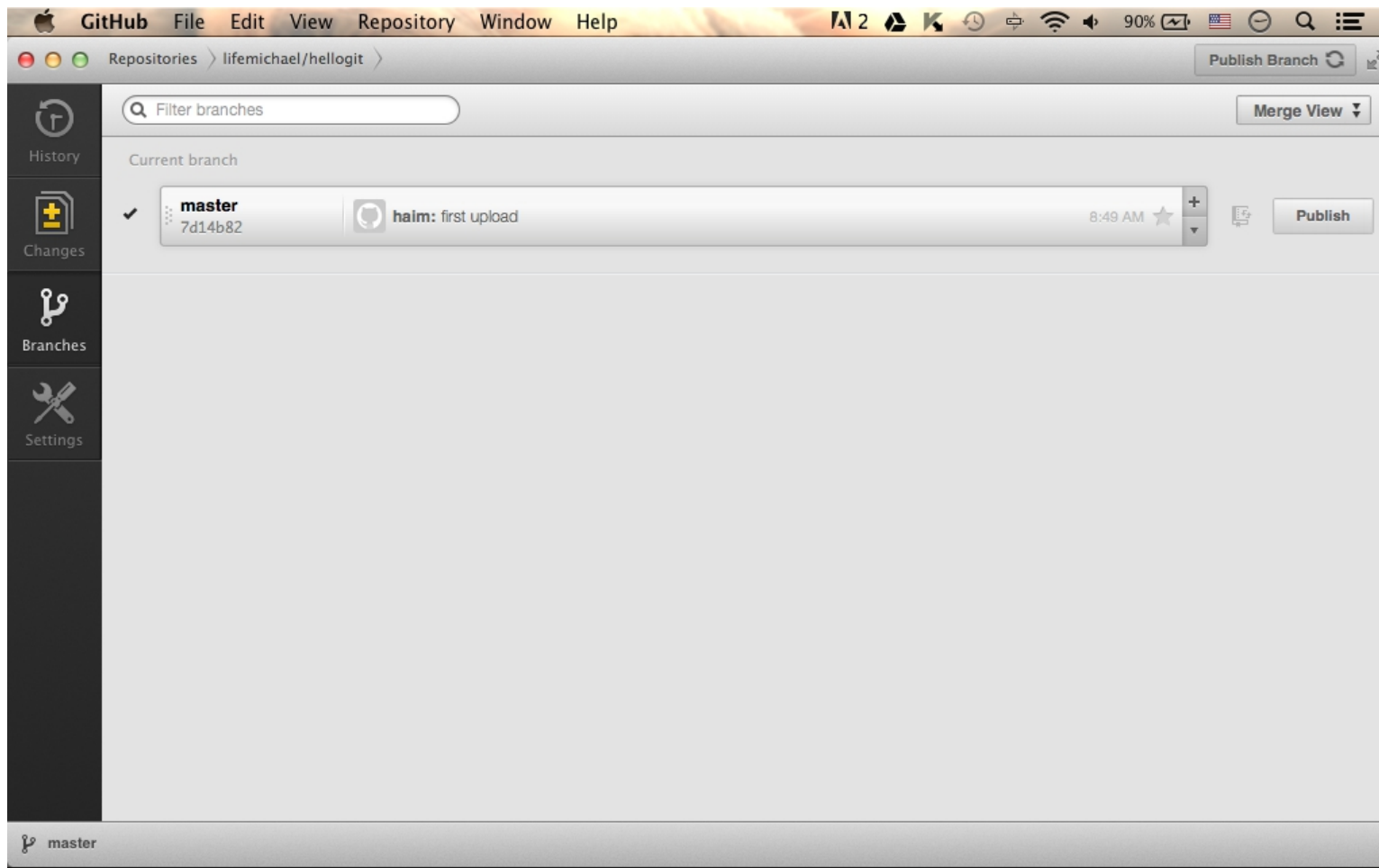
Using GitHub Client



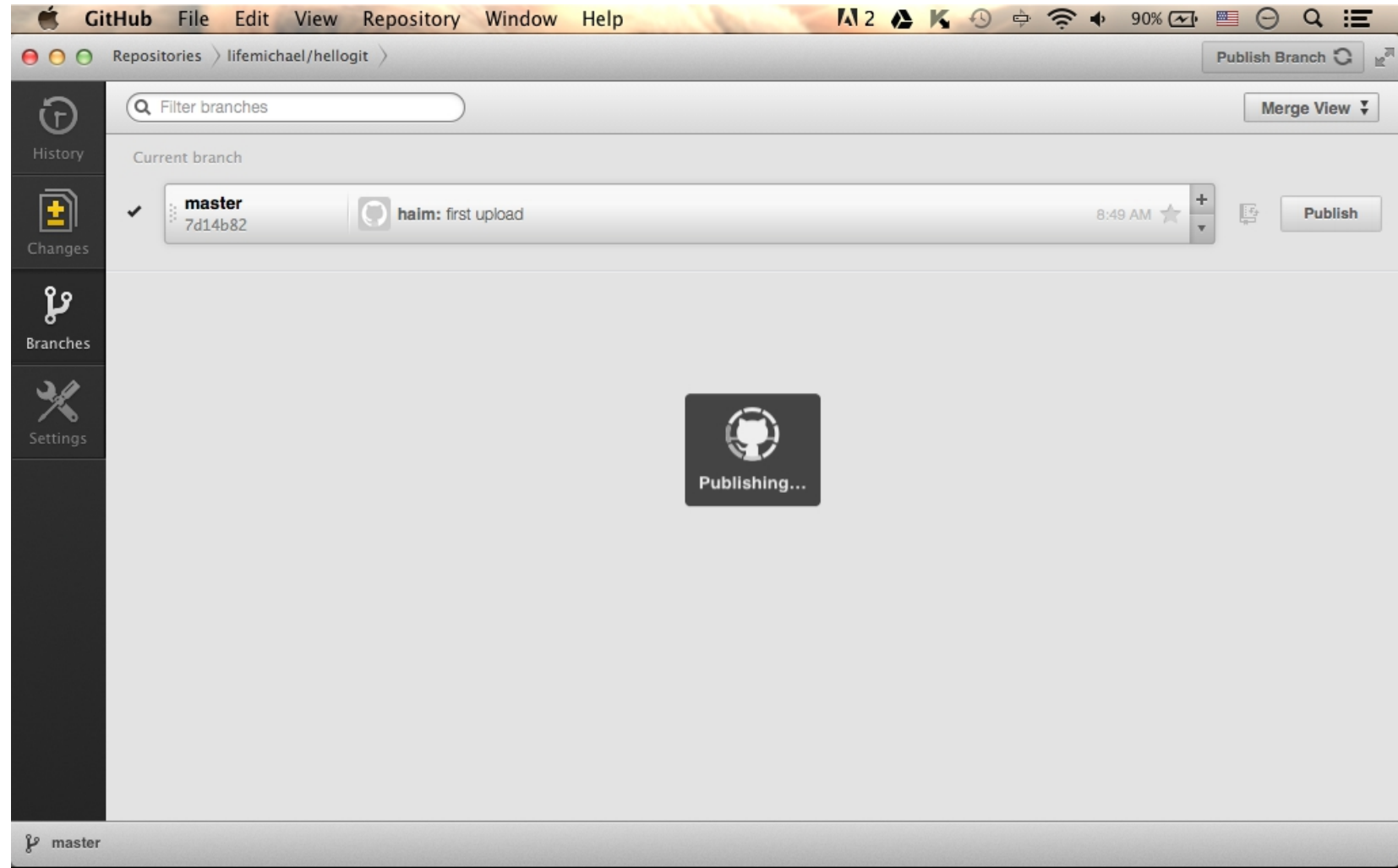
Using GitHub Client

- ❖ If the local repository is not synced with GitHub server side we can switch to the branches screen and press the publish button in order to upload all files to the GitHub server.

Using GitHub Client



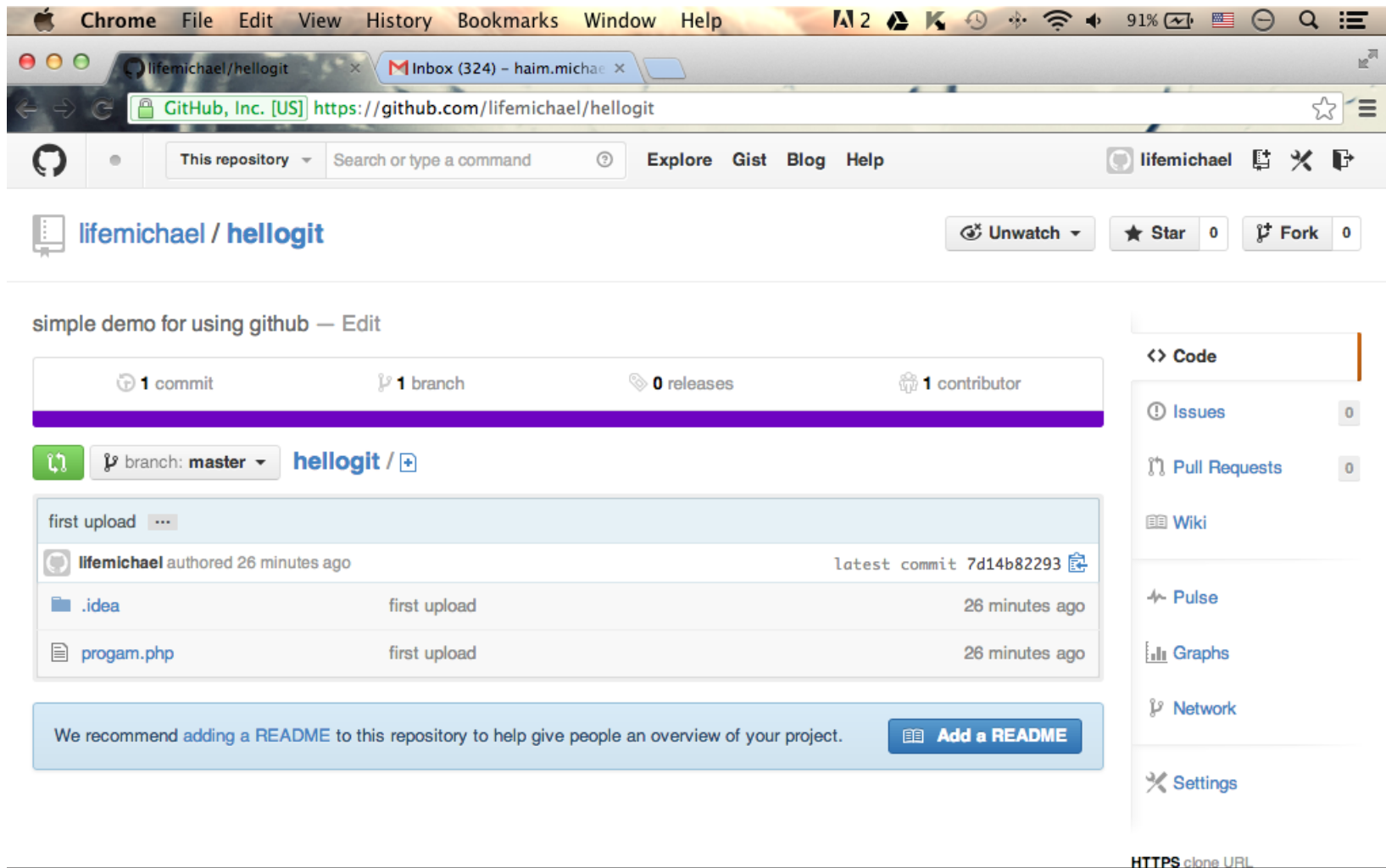
Using GitHub Client



Using GitHub Client

- ❖ Once published we can check our project on GitHub and find all files.

Using GitHub Client



Using GitHub Client

- ❖ We can now continue with our ongoing work on our project and commit the changes to our local repository.
- ❖ Having the local repository synced with GitHub server we will be able to see the ongoing changes in our project both local on our computer and remotely on GitHub server.