Git Steps and Commands

The following is a list of steps and common commands used to perform operations in Github. Steps 1-4 are used only the first time when the github set up is performed with your credentials. Step 5 is used when a new repository is cloned from github to the local system. Step 7 consists of the most commonly used commands for github operations.

1. Create a Github account and save the credentials.

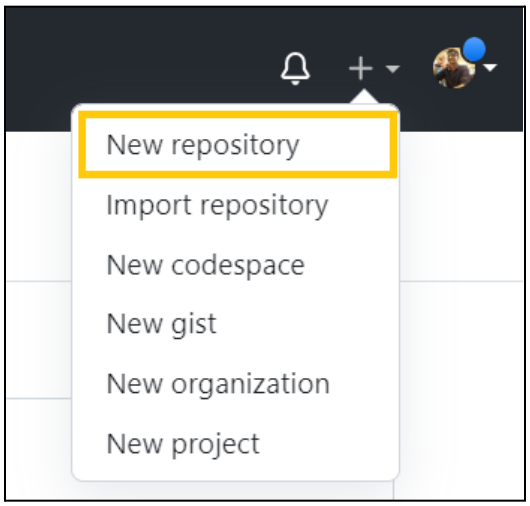
2. Install Git on your system: https://git-scm.com/downloads

3. After installing you can use either Git Bash, Command Prompt, or terminal to execute Git commands.

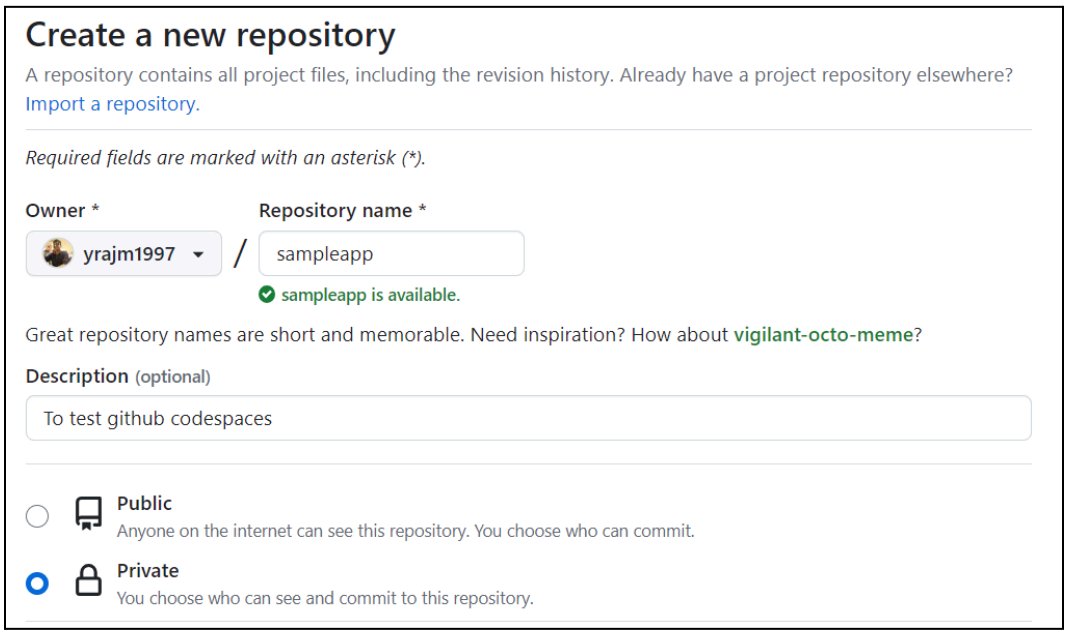
4. Introduce yourself to Git with the name and public email address of your Github account before doing any operation. The easiest way to do so is:

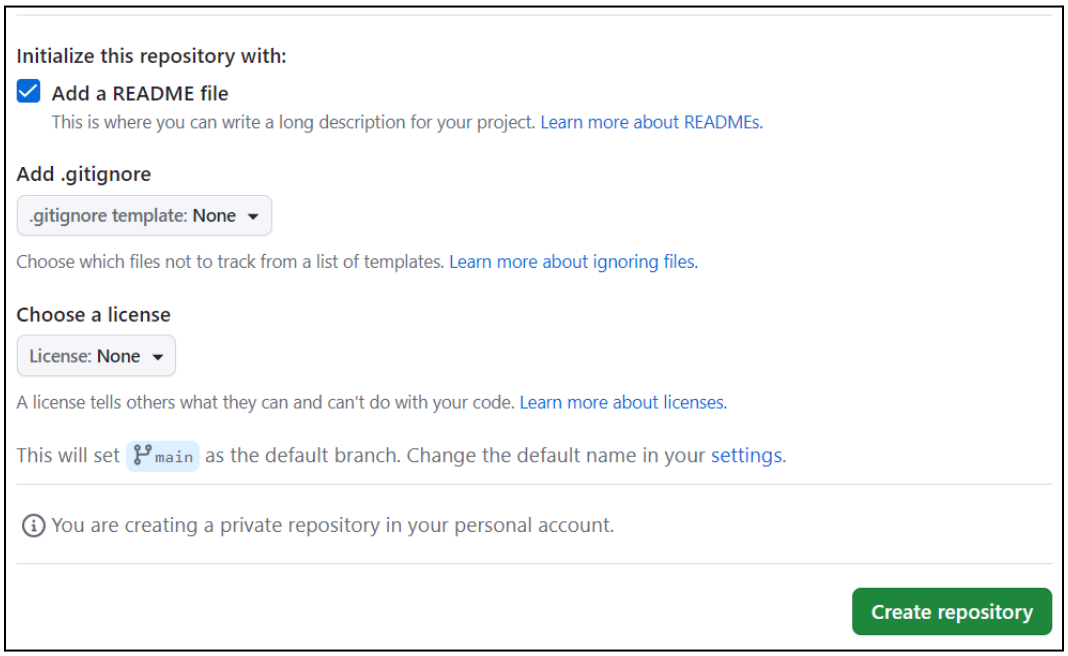
```
$ git config --global user.name "Your Name Comes Here"
$ git config --global user.email "you@yourdomain.example.com"
```

5. Steps to clone a new repository in your system:
   - Create a new repository on GitHub

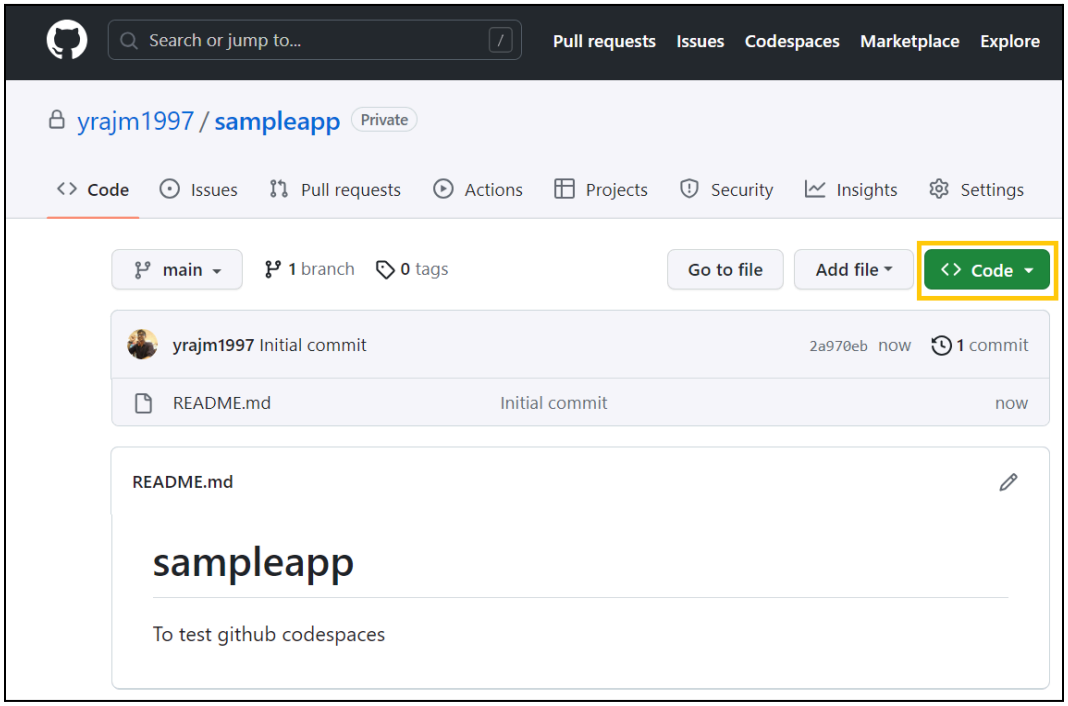


- Fill in details for your repository such as repository name, description, and whether to make it public or private, and then click Create repository.

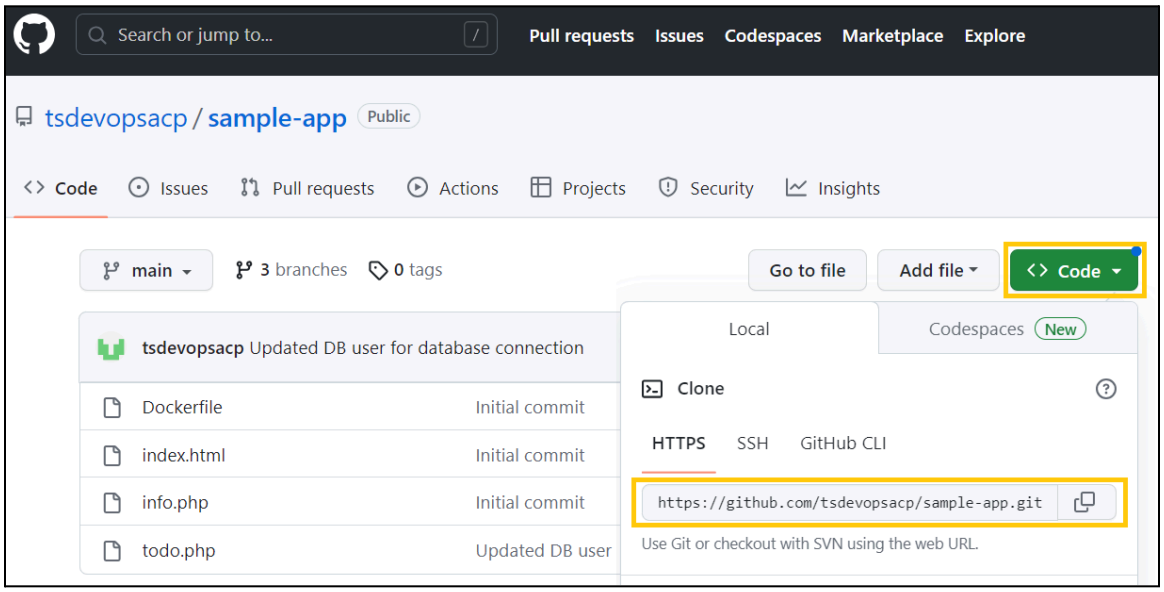




- A repository should be created similar to below. Now, go to the 'Code' dropdown.



- Obtain the `repository path` from the github repository by copying URL from under the 'Code' tab of the repository as shown below:



- Open Git Bash or Command Prompt
- Select the folder/location where you want to clone it
- Run below command

```
$ git clone <repository path>
```

6. A repository may have multiple branches. To check which branch we are at currently, run the following:
   ```
   $ git status
   ```

7. To push changes in a file from your local system to the remote repository, follow the steps below:
   - Synchronize your local system with remote repository by using the command:
     ```
     $ git pull
     ```
   - Open the file in your local system and make changes to it
   - Then run these commands
     ```
     $ git add file_name_with_extension
     $ git commit -m "write commit message here"
     $ git push
     ```

     In above lines,
     git add: will stage the changes to be made
     git commit: will commit the changes
     git push: will push the changes to the repository

8. To create a new branch, use below command:
   ```
   $ git branch other_branch_name
   ```

9. To get a list of all existing branches, run below command:
   ```
   $ git branch
   ```

10. To change the current branch to some other existing branch, use below command:
    ```
    $ git checkout other_branch_name
    ```

11. To delete a branch, use below command:
    ```
    $ git branch -d other_branch_name
    ```

References:

- Git - Simple guide
- Git documentation