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Roll# Bsef18m023

A good link about git: <https://rubygarage.org/blog/most-basic-git-commands-with-examples#:~:text=Create%20a%20new%20file%20in,Repeat>.

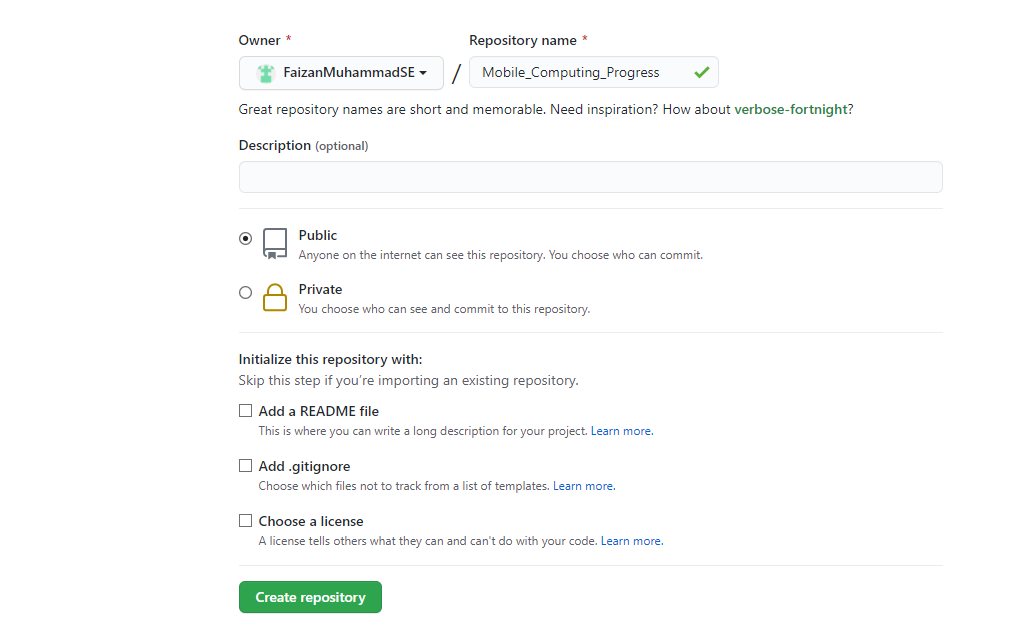
Version Control System is used to maintain record of updates done by you on your project, it is easily accessible from any place.

**Git is** a version control system that lets you manage and keep track of your source code history. **GitHub is** a cloud-based hosting service that lets you manage **Git** repositories.

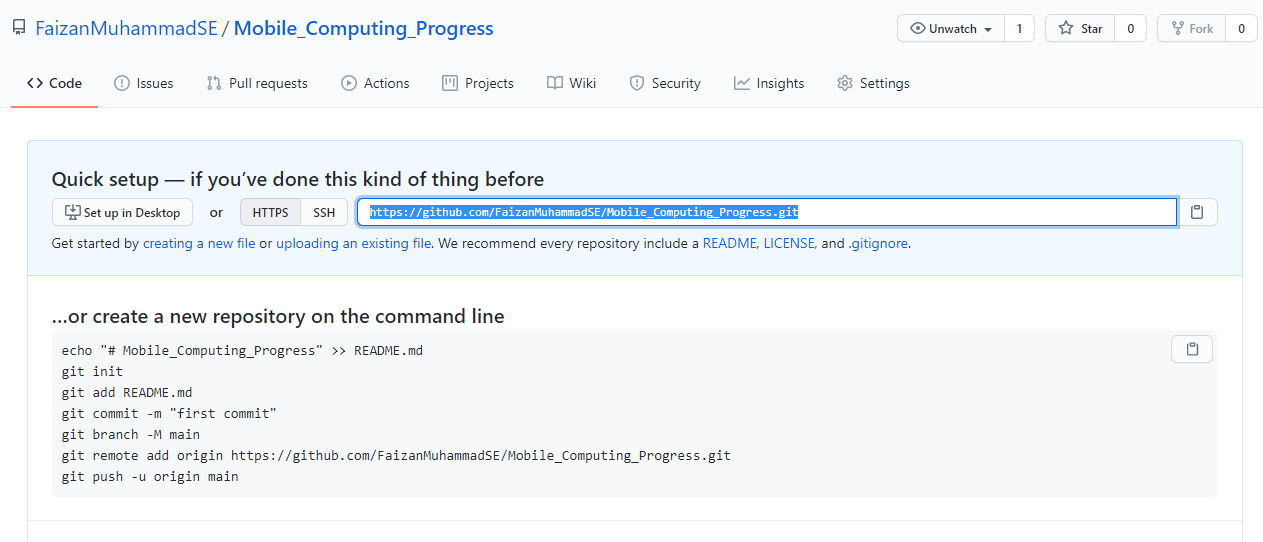
**GitHub:**

Here data is stored is the form of repository

**Public** repositories are available to everyone on internet.



The following link will be used to access repository, so you can give this link to concern people without any hesitation, they will interact with repository through this link



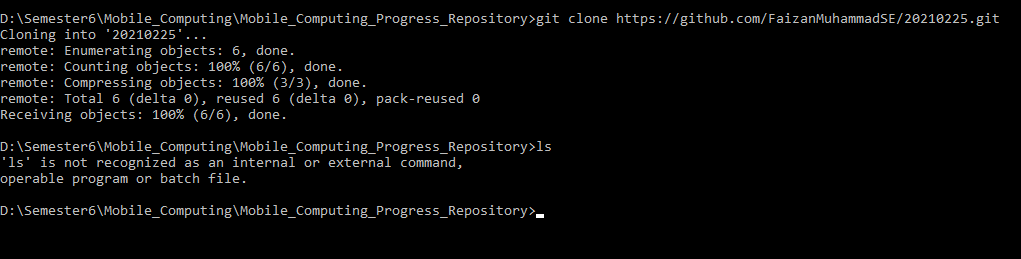
<https://github.com/FaizanMuhammadSE/Mobile_Computing_Progress.git>

**Clone of a repository:**

When you create a repository on GitHub, it exists as a remote repository. You can clone your repository to create a local copy on your computer and sync between the two locations.

When you clone a repository, you copy the repository to your computer

**Command: git clone url**



**Note: while cloning, your whole remote repository will be copied at current location(where you run command) and folder will have the same name as of repository.**

**Commad: git status**

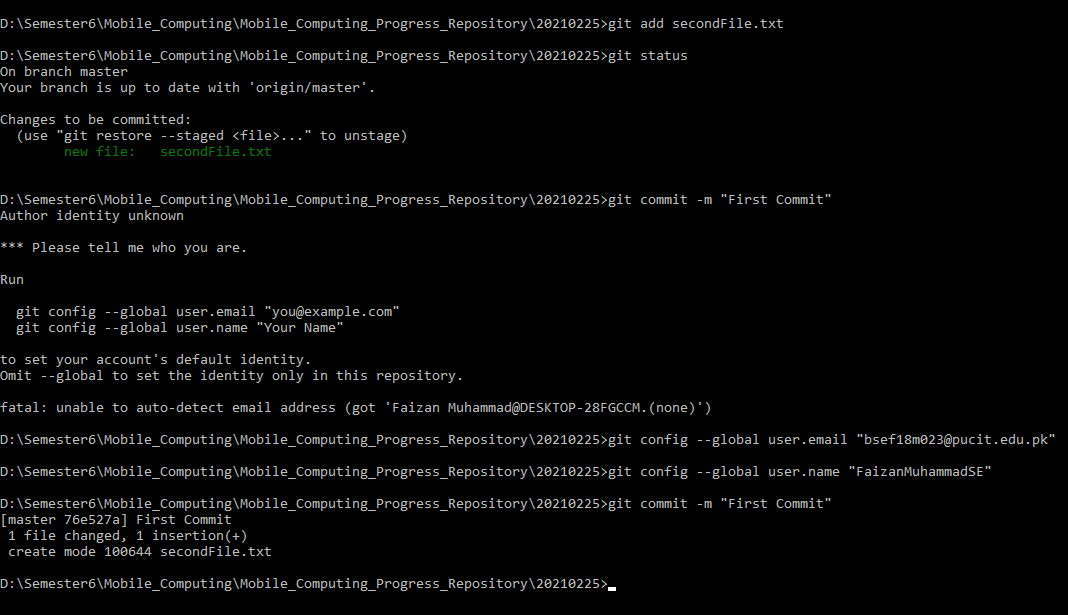
It will tells us about status of local repository and helps us to find out the files which are not added yet.

**Command: git add filename**

**git commit –m “message”**

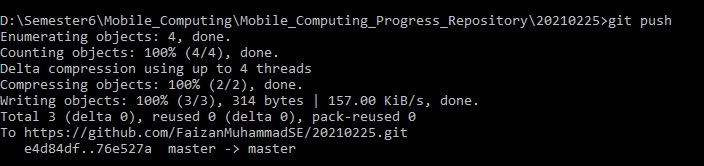
As you are working on your local computer and when you will do changings in your directory git will not be able to track it and know nothing about it. So you have to add it, by adding that specific file it will go in staging area(it is like a bucket of files which will go to remote repository GitHub), you can also remove files from staging area.

After adding, now files are in staging area, and now commit(attach message with it) it and now that file is in your local repository and git knows about it, and by commiting you get some ID, by using that you will know in future that what you did.

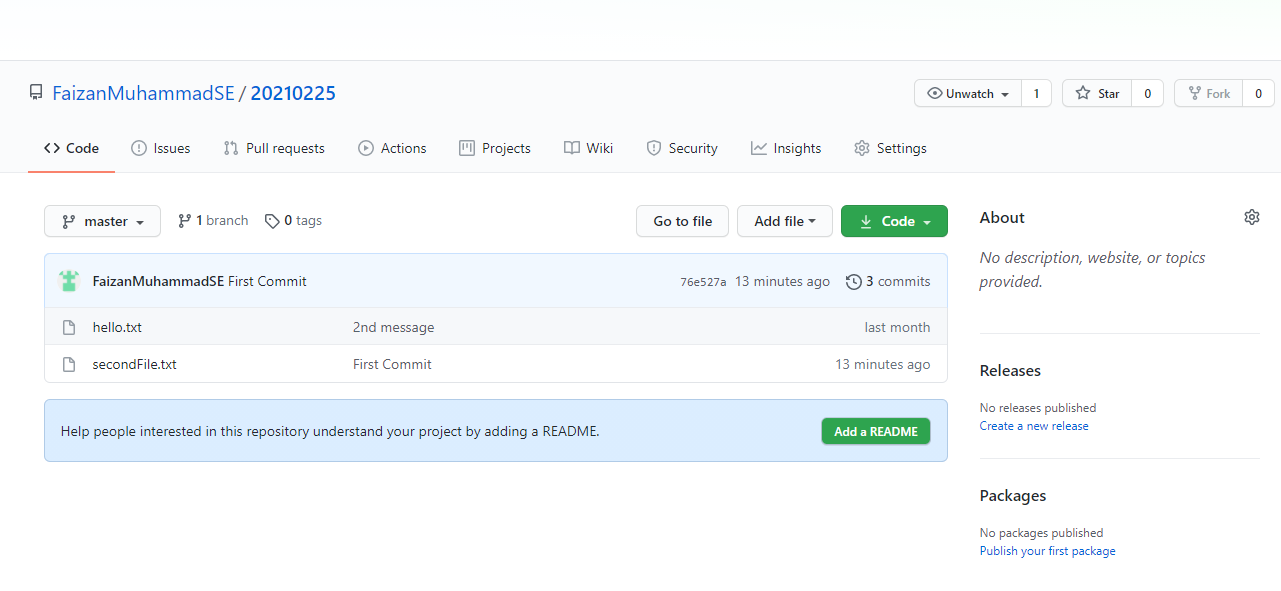


**Now we update our local repository but it is not synchronized with remote repository, so now push it to remote repository by using**

**Command: git push**

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**Now both local and remote repository are synchronized/same**

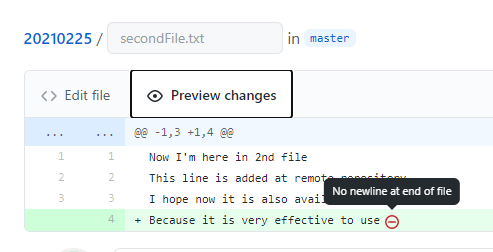
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**So in short when you done any change in your project locally then use these 3 commands to synchronize your project with remote repository**

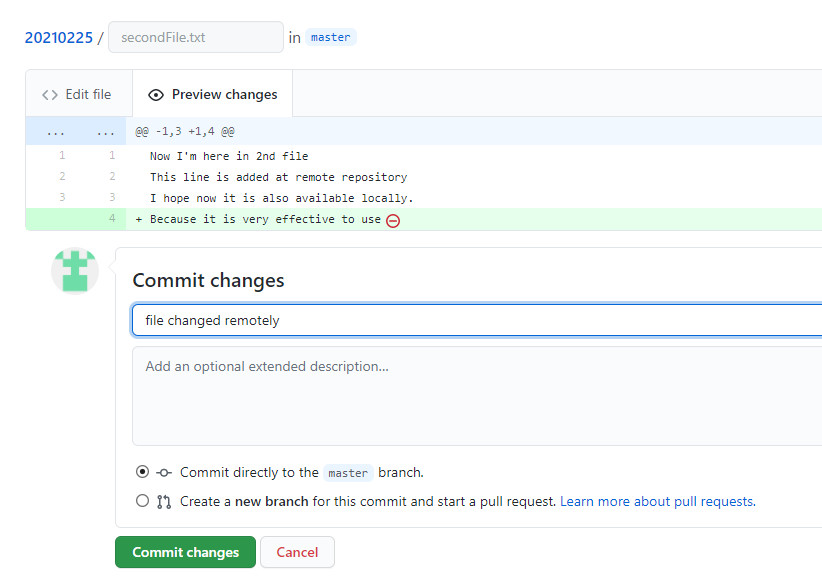
1. **git add filename Or git add . (for all files)**
2. **git commit –m “message”**
3. **git push**

even when you change a single line locally yoy have to performe these 3 commands to synchronize it

**How to synchronize project with local repo when you edit in at GitHub (local repo)**

**while editing file at GitHub you can also see changes done by you** ****

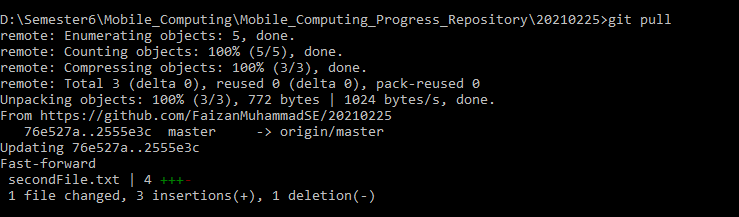
**When you edit file at GitHub, after editing, write commit message and click commit changes button present at bottom of file**

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**Now it is changed remotely, how to synchronize with local repo**

**Command: git pull**

**By using this command your local repo will be refresh/reload and changes will be visible**

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