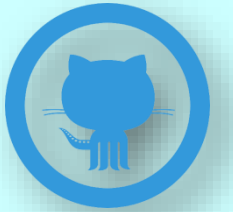
Center for Applied Research

Rajiv

Department of Computer Science Engineering
AJAY BINAY INST. OF TECH

Git Group

git



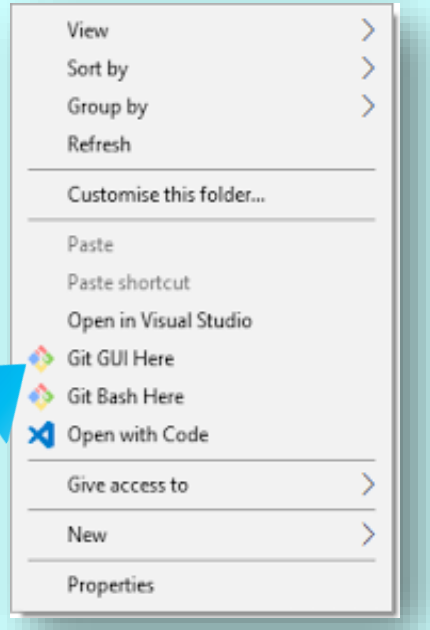
GitHub

GitLab

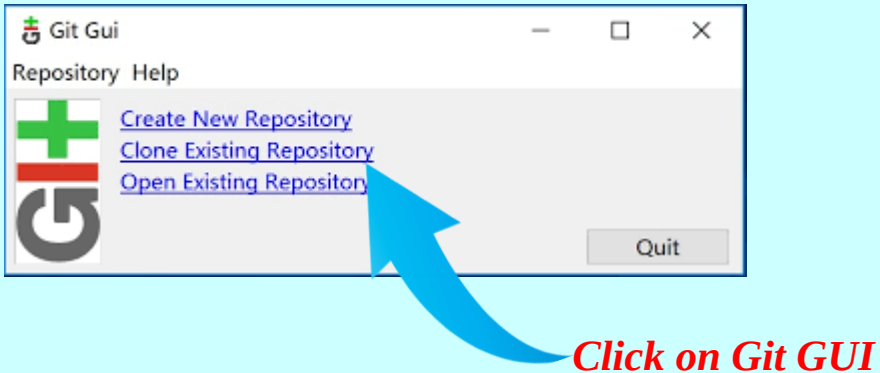
What is git ?

- Git is a **distributed version control system** that tracks changes in any set of computer files, usually used for coordinating work among programmers who are collaboratively developing source code during software development.

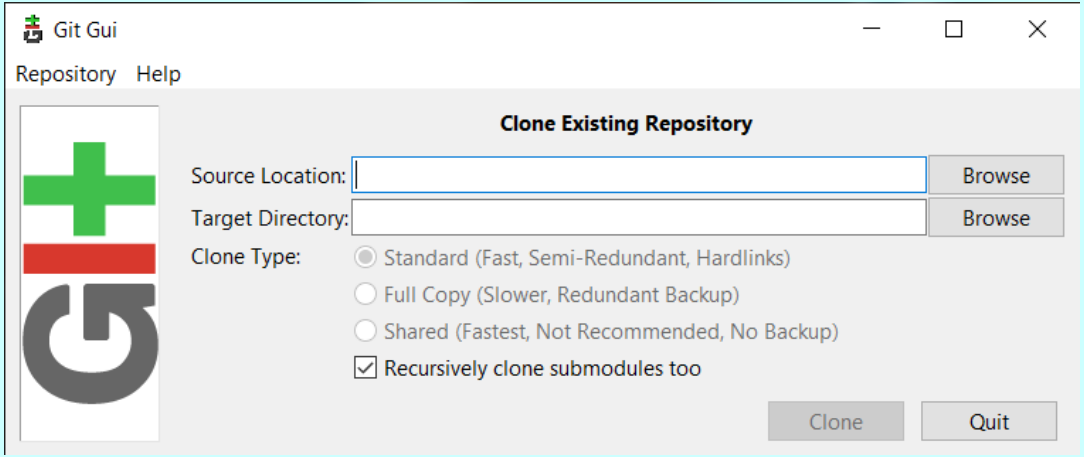
Click on Git GUI



git Conti..


Git Gui
Repository Help
Create New Repository
Clone Existing Repository
Open Existing Repository
Quit
Click on Git GUI

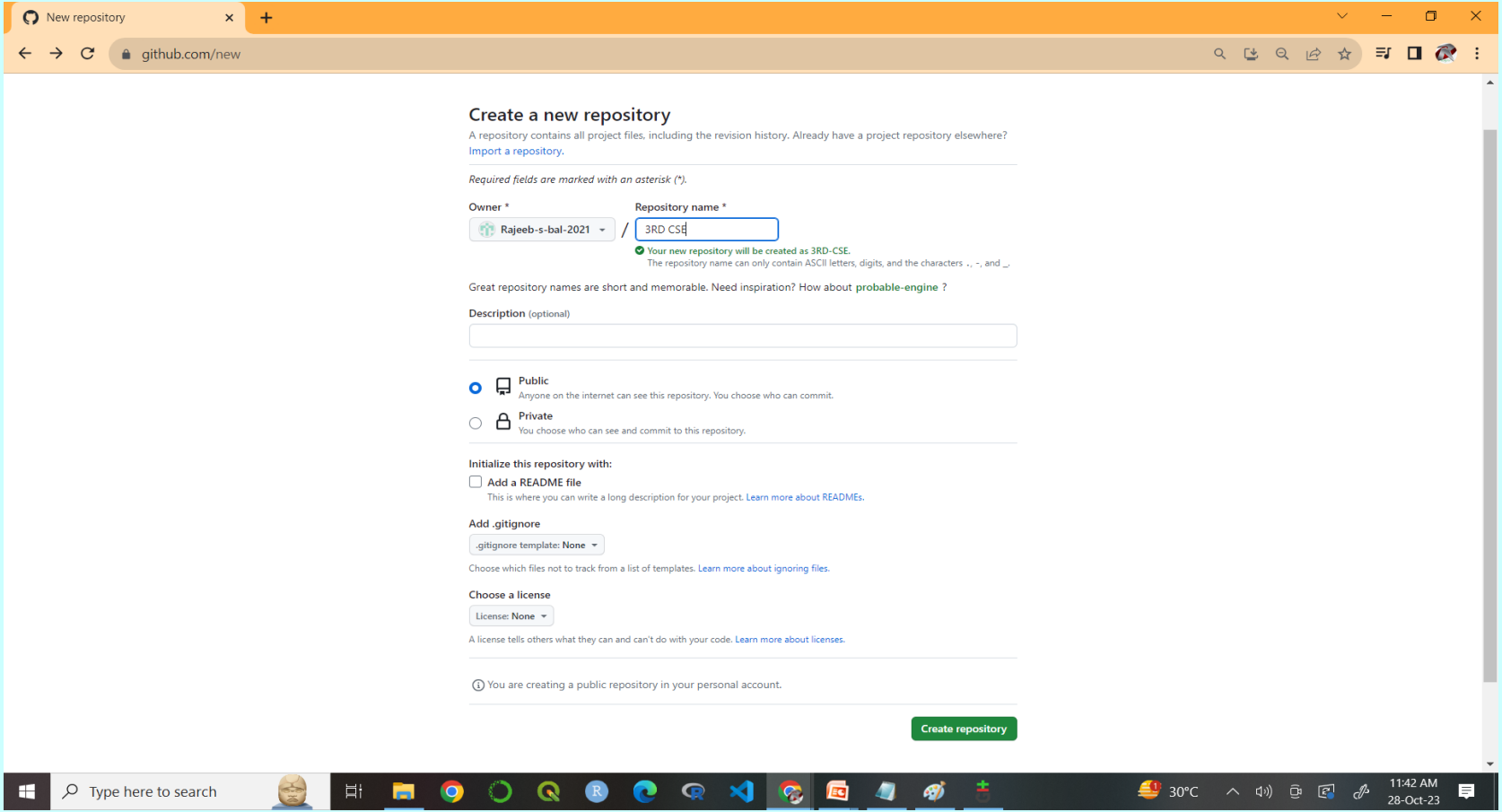
git Conti..


Git Gui
Repository Help
Clone Existing Repository
Source Location:
Browse
Target Directory:
Browse
Clone Type:
Standard (Fast, Semi-Redundant, Hardlinks)
Full Copy (Slower, Redundant Backup)
Shared (Fastest, Not Recommended, No Backup)
Recursively clone submodules too
Clone
Quit

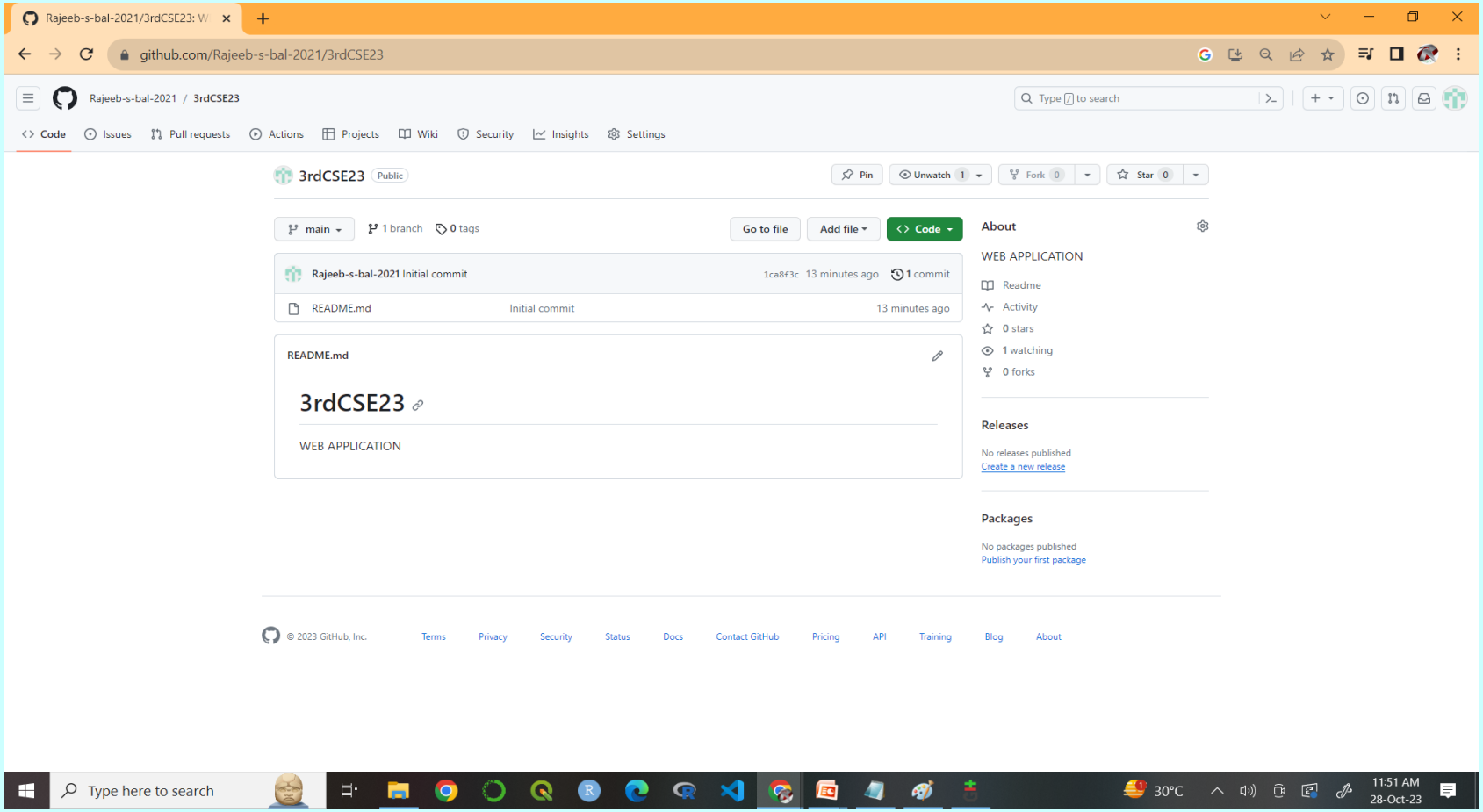
What is GitHub ?

- GitHub is an online software development platform.
- It's used for storing, tracking, and collaborating on software projects.

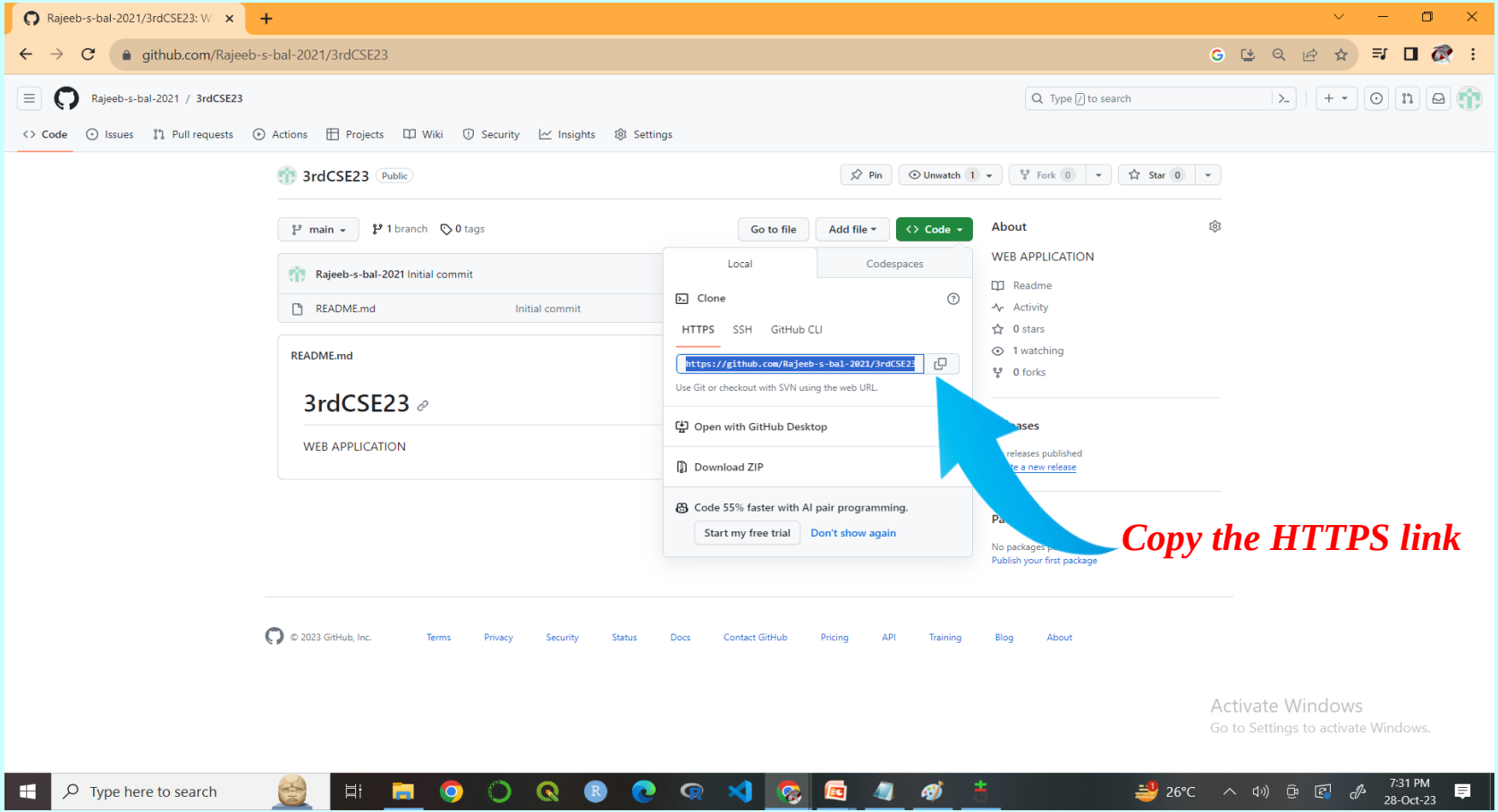
GitHub Conti..



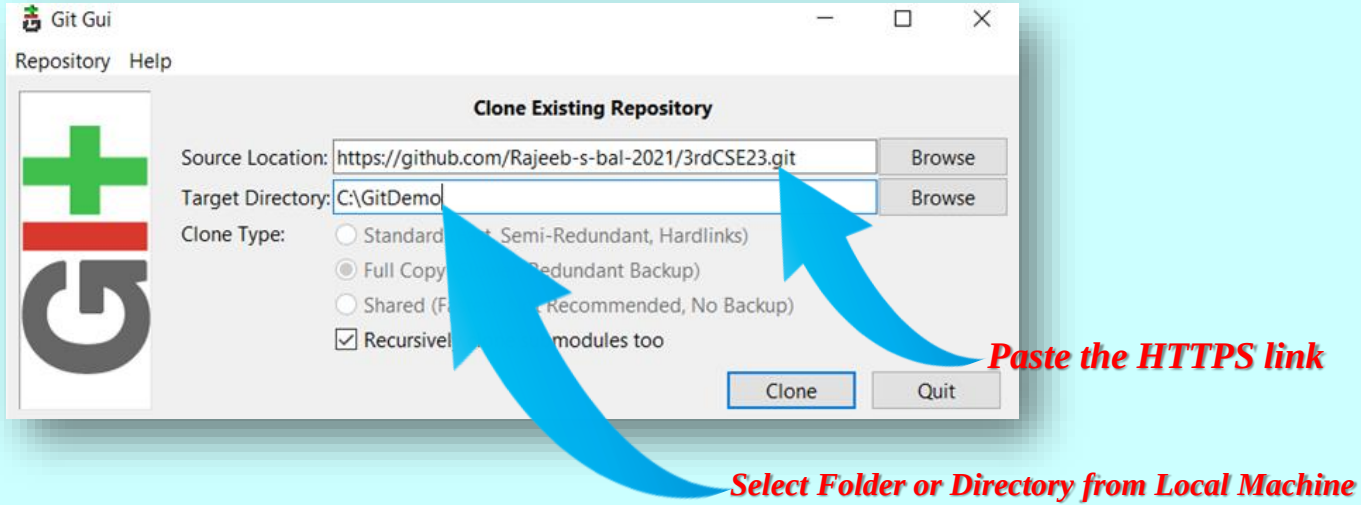
GitHub Conti..



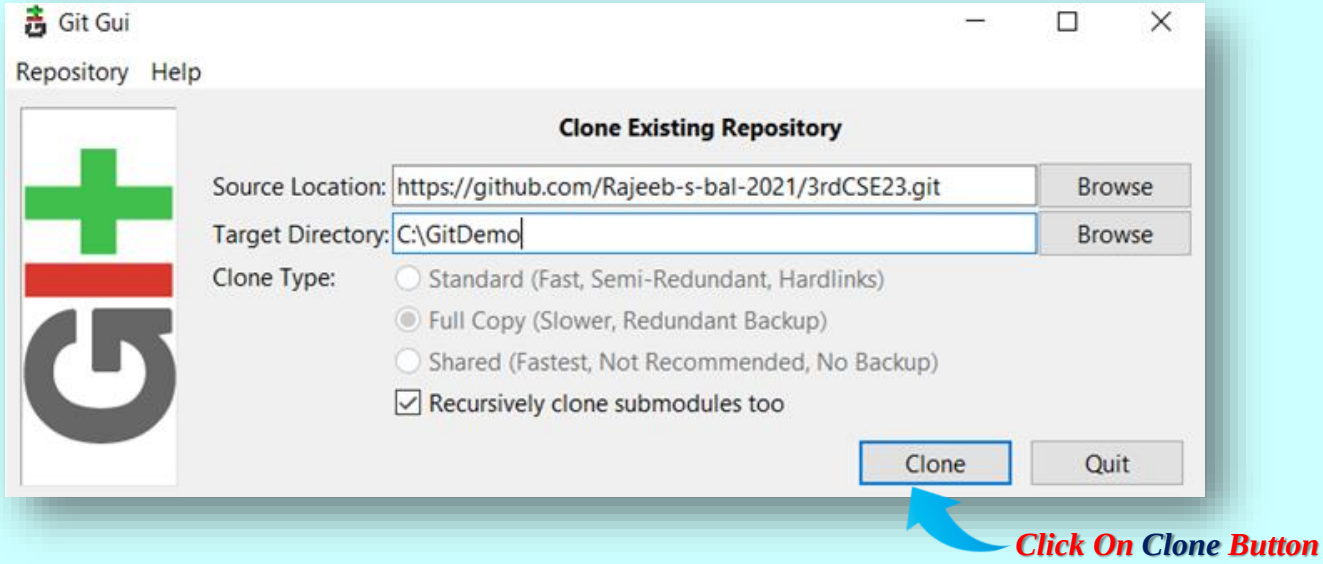
GitHub Conti..



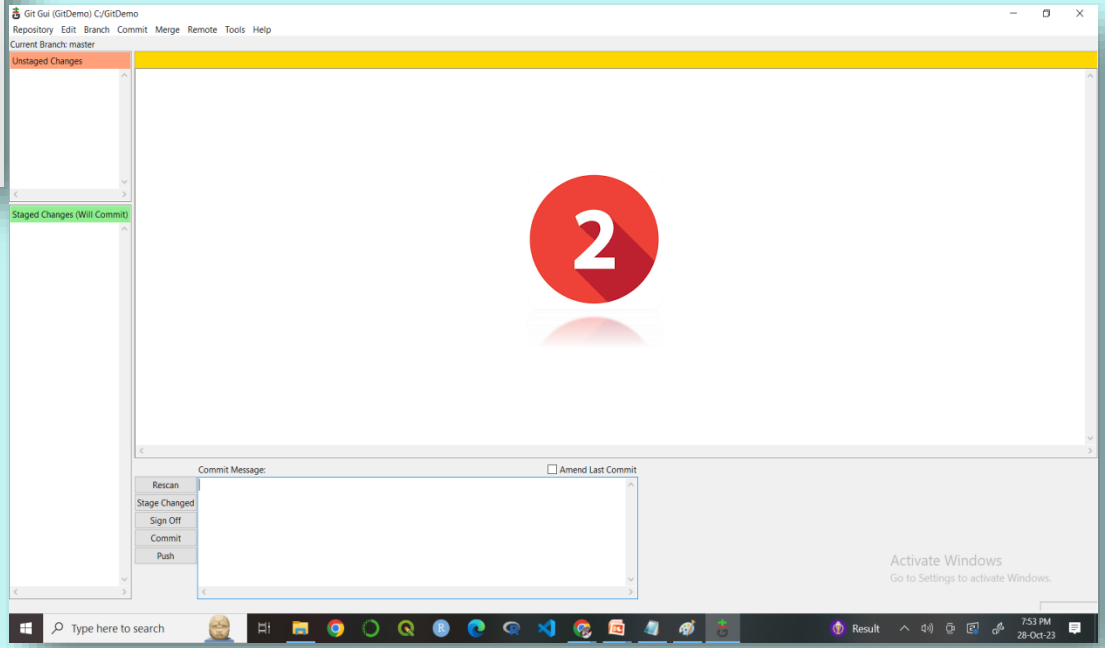
Git Gui Conti..



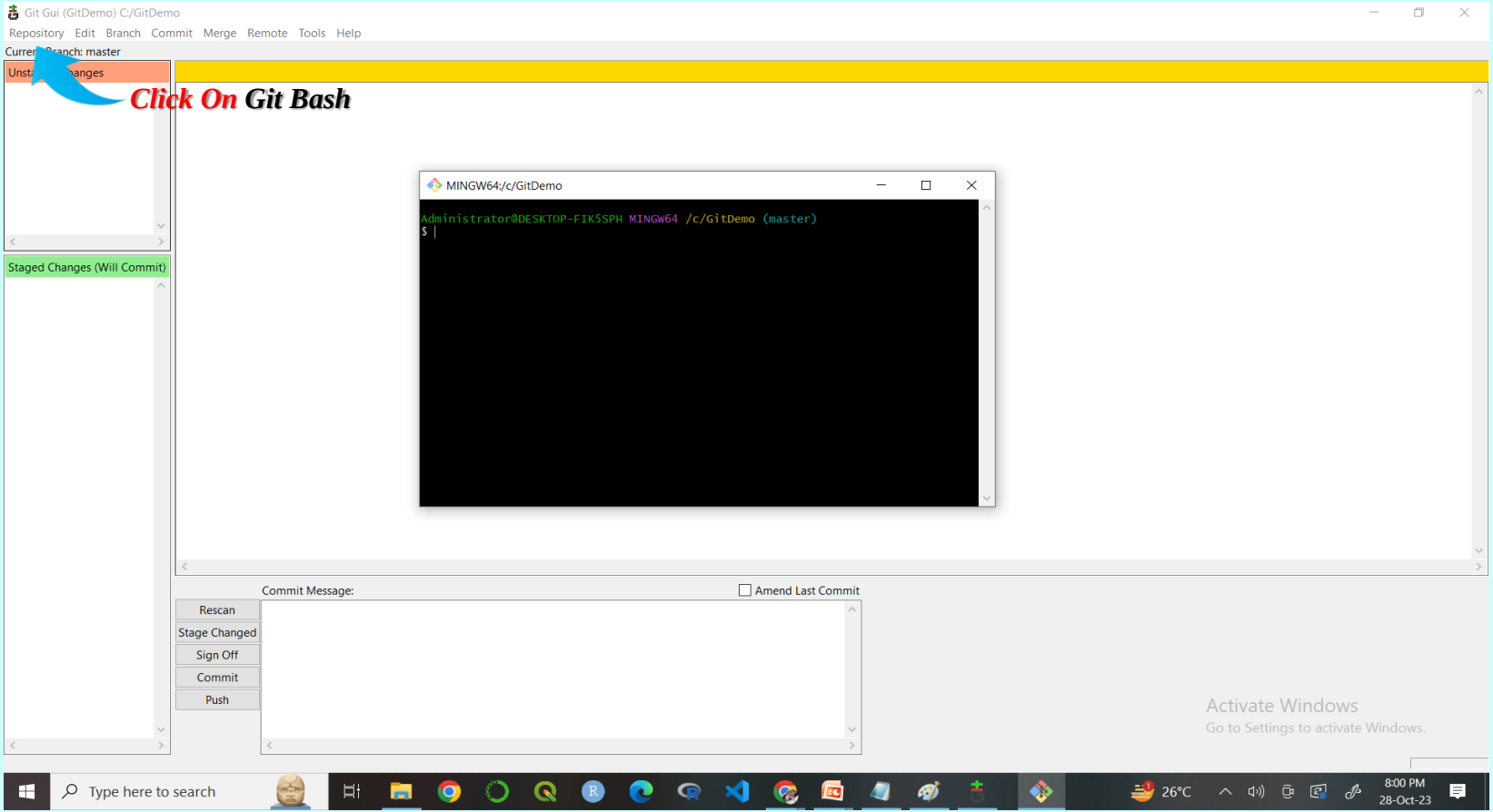
Git Gui Conti..



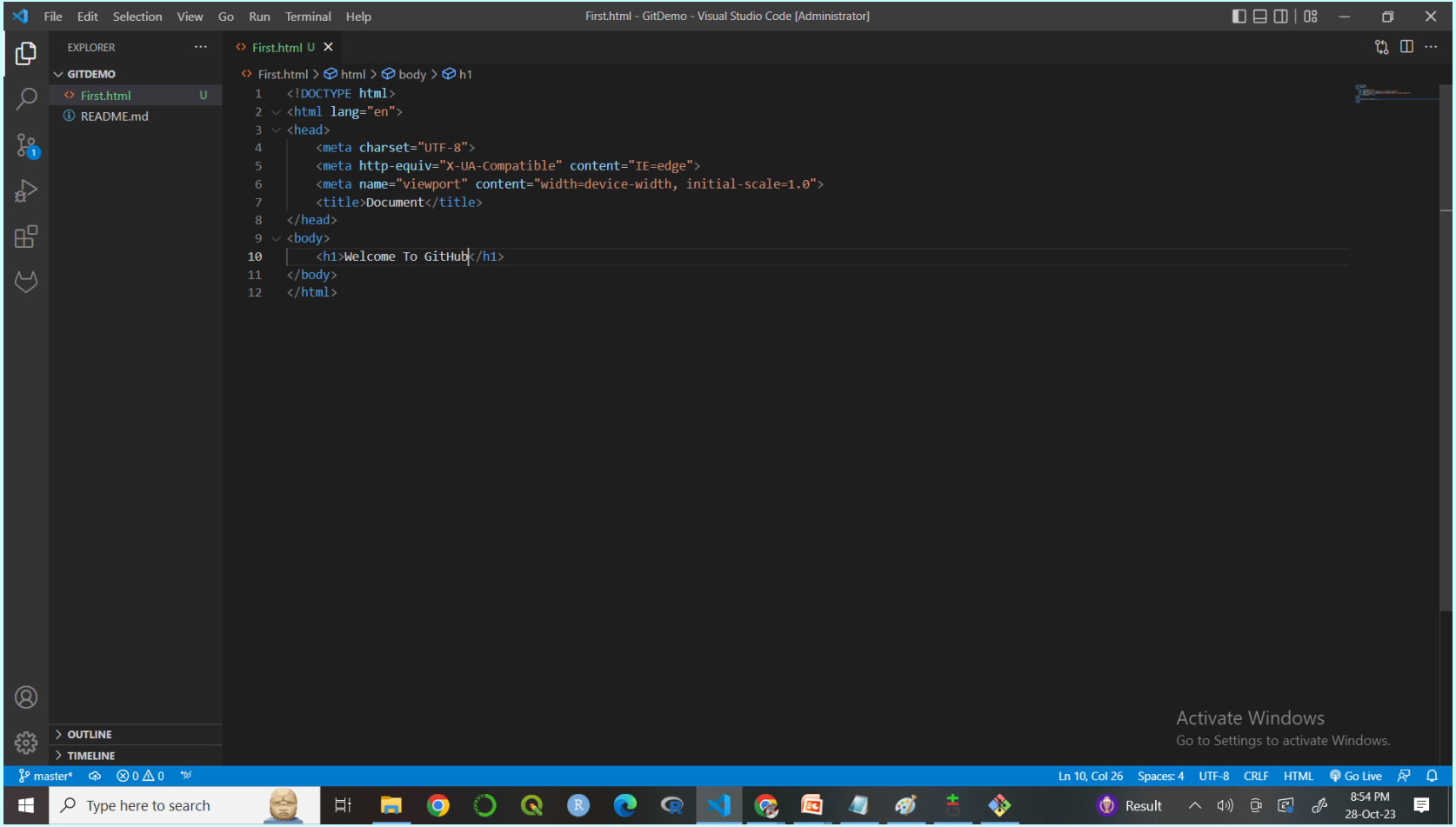
Git Gui Conti..



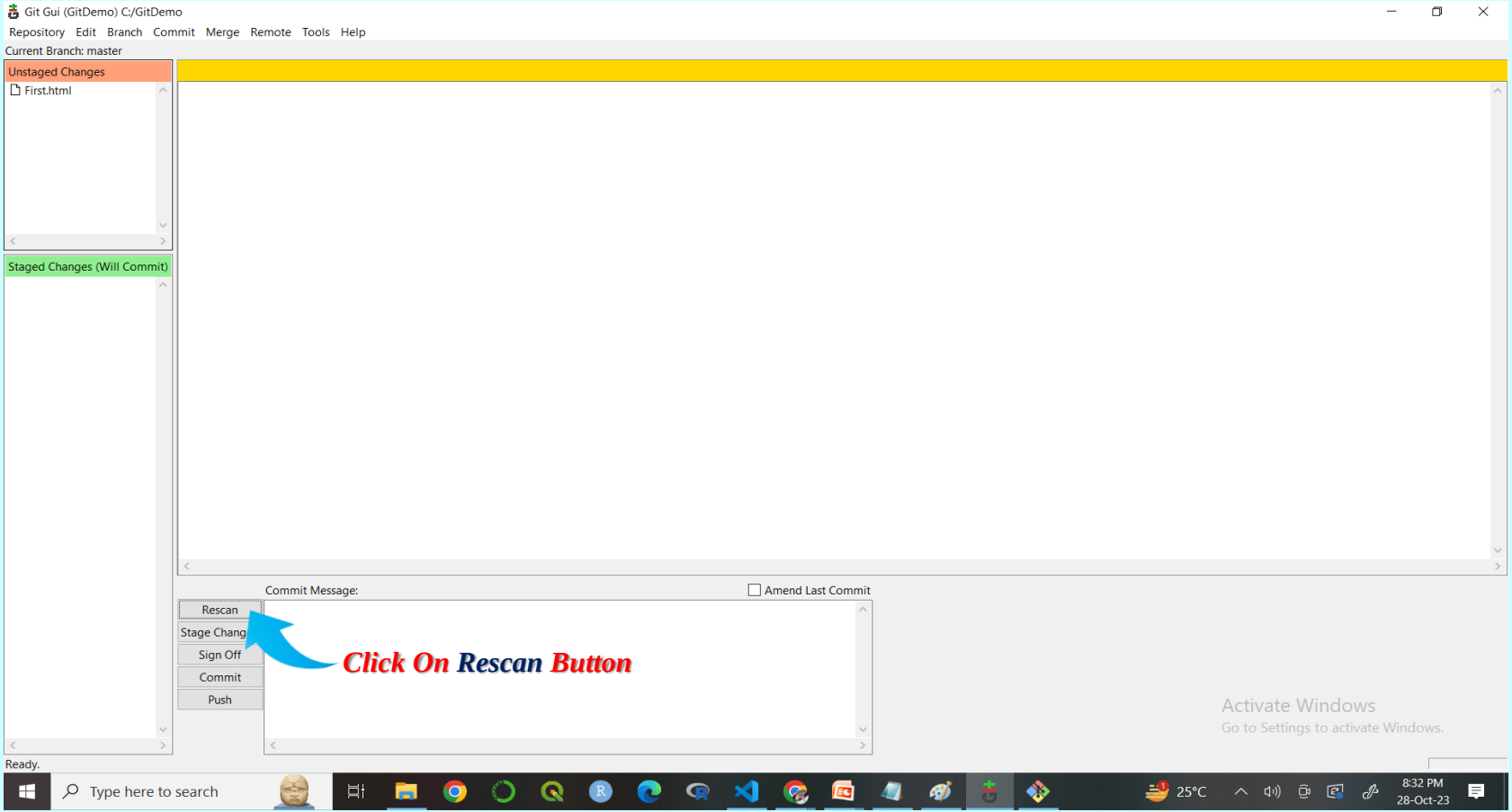
Git Gui Conti..



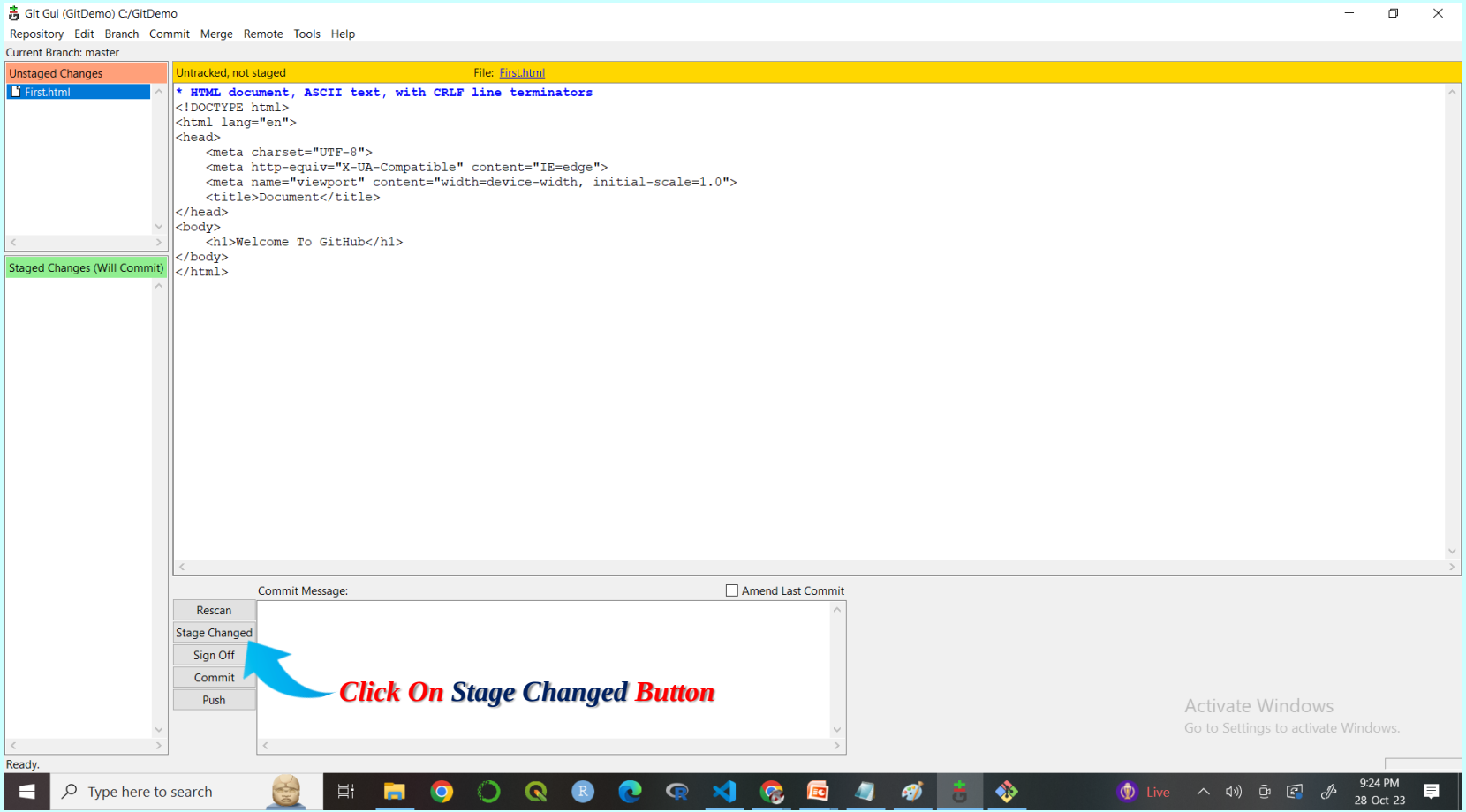
Git Gui Conti..



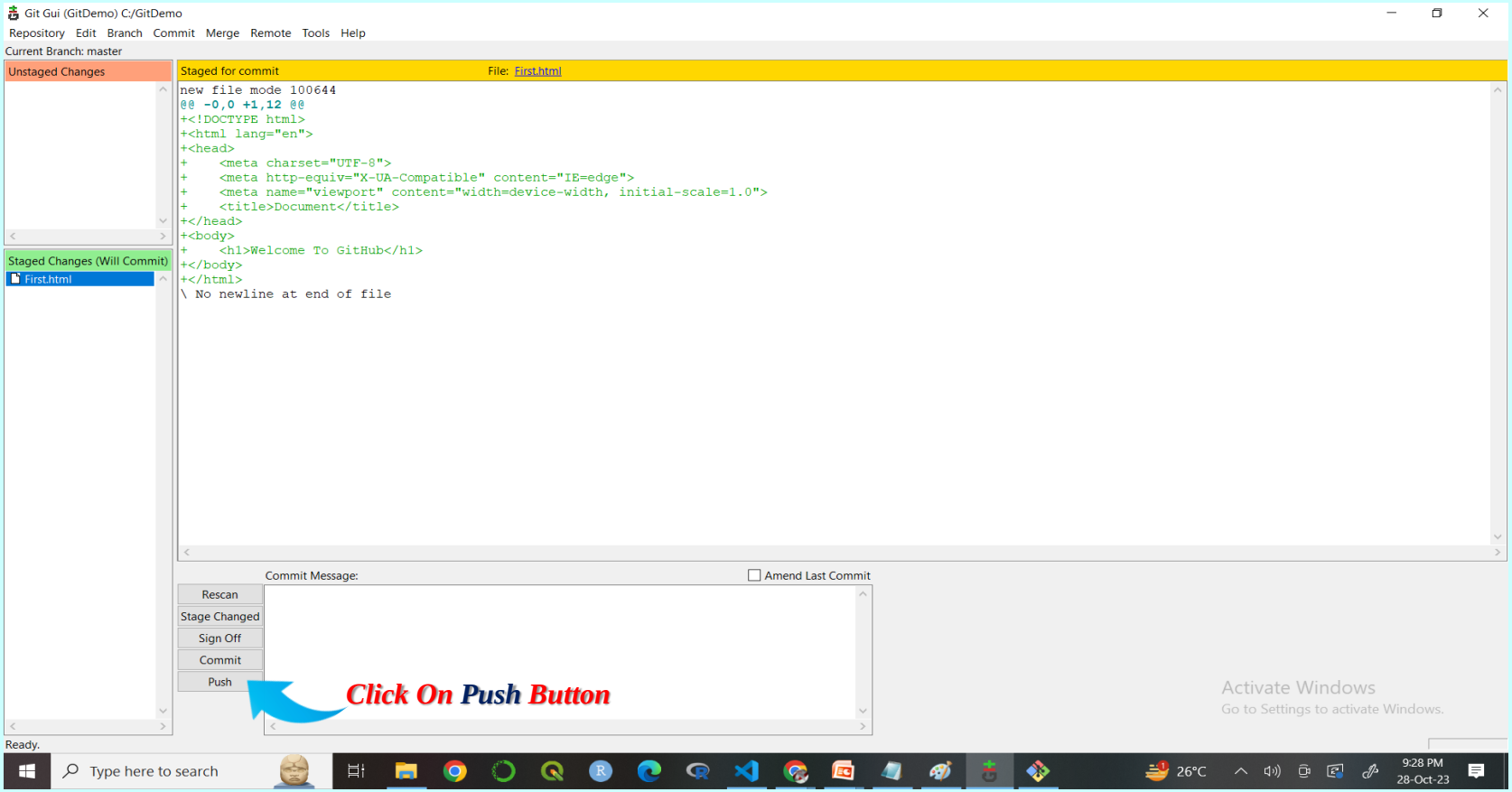
Git Gui Conti..



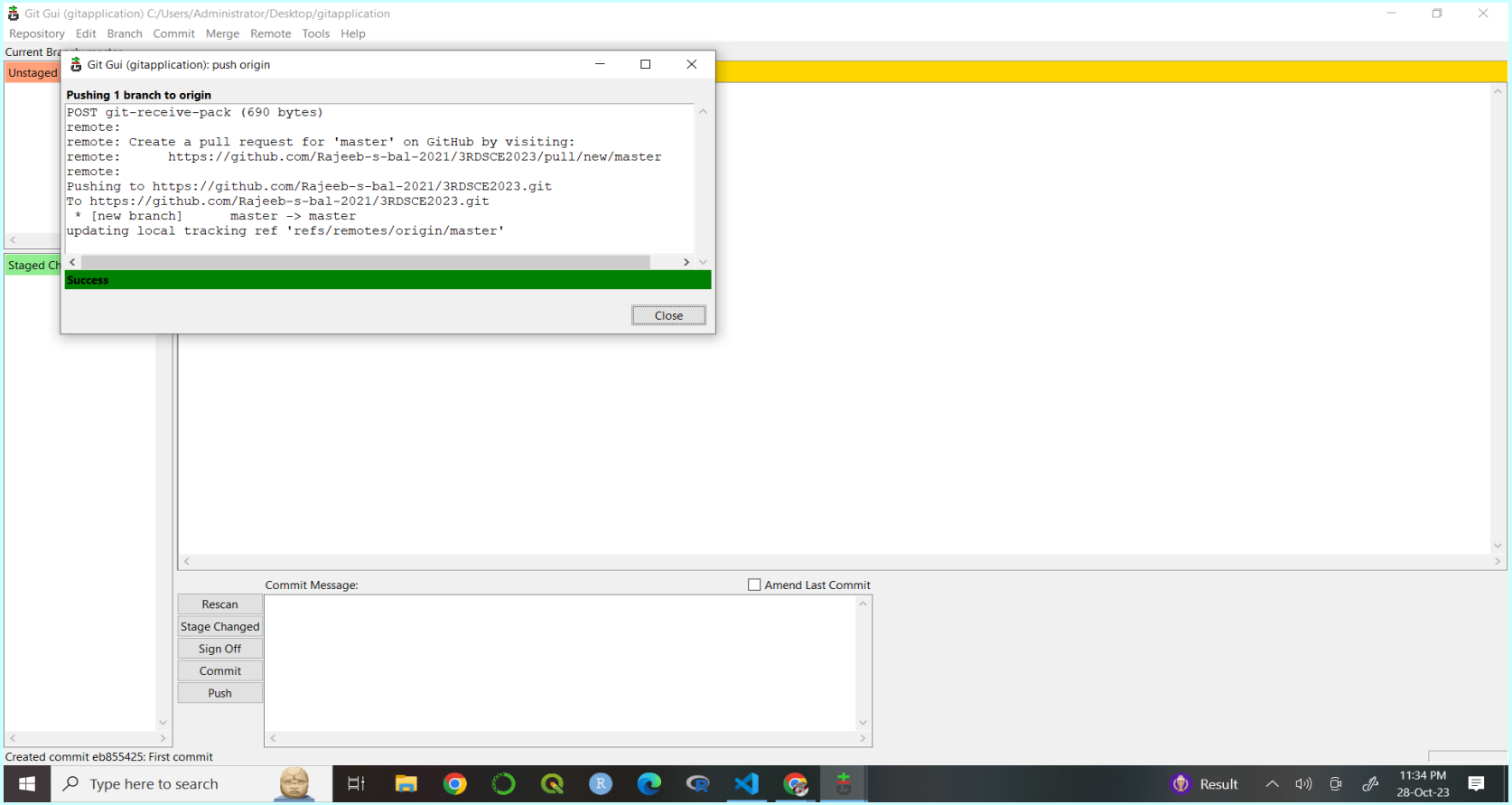
Git Gui Conti..



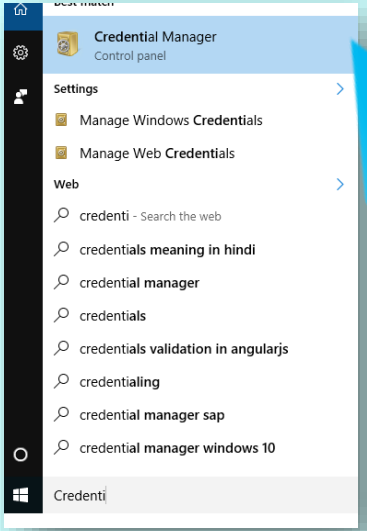
Git Gui Conti..



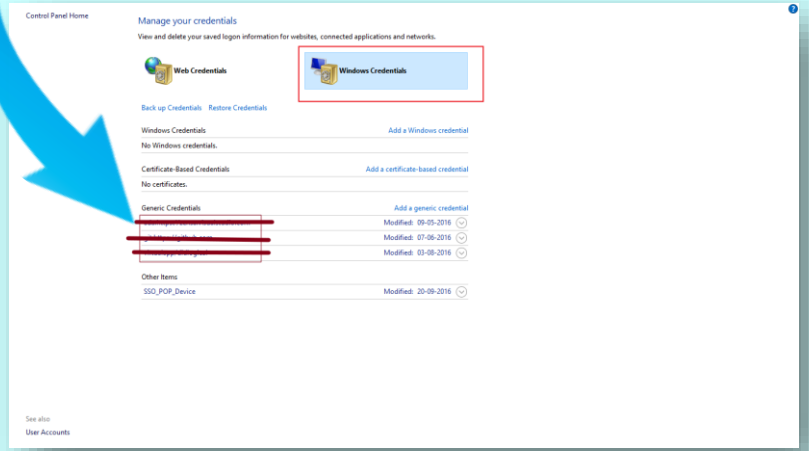
Git Gui Conti..



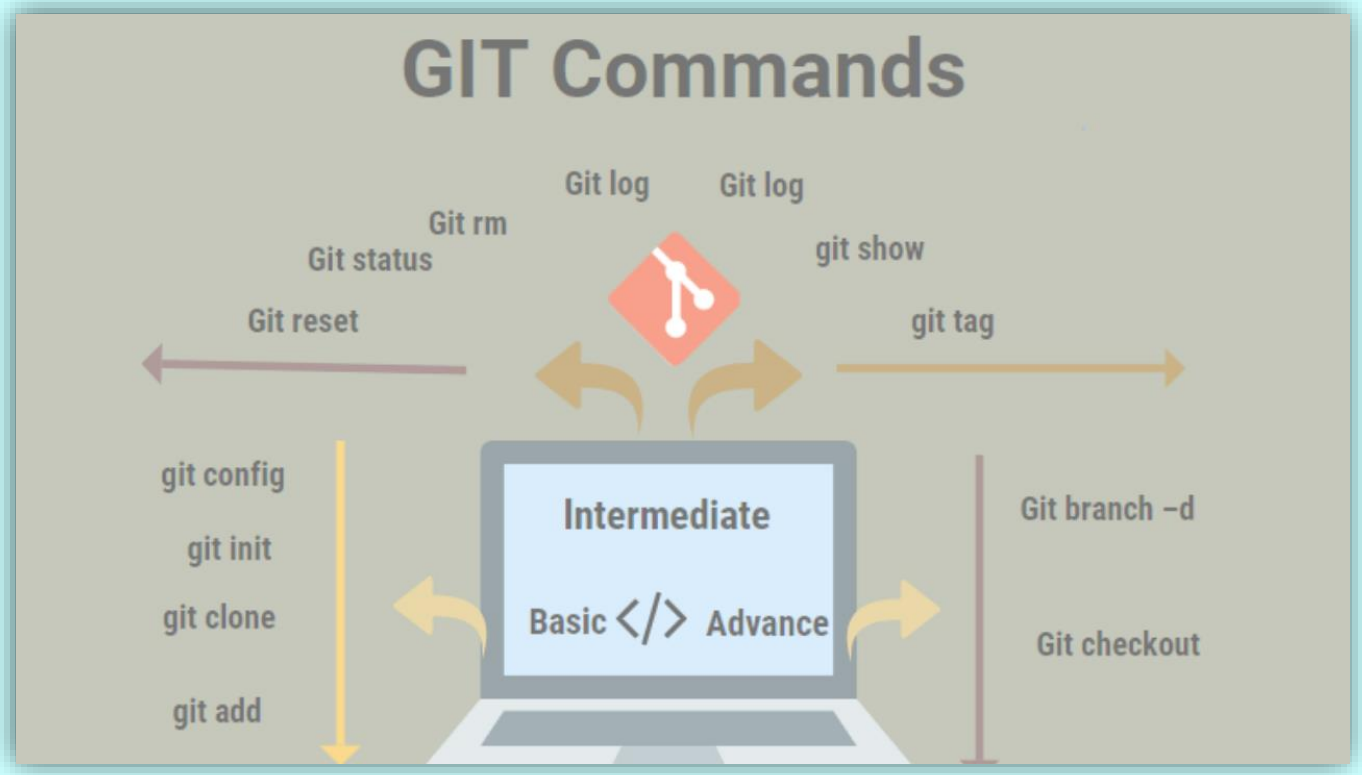
Error in Git Gui Conti..



- Go to **Windows Credentials**
- **Delete** the entries under Generic Credentials




git
commands


GIT Commands
Git log
Git log
Git rm
Git status
git show
Git reset
git tag
git config
git init
git clone
git add
Intermediate
Basic </> Advance
Git branch –d
Git checkout

Git Commands Conti..

Git: configurations

```
$ git config --global user.name "FirstName LastName"
$ git config --global user.email "your-email@email-provider.com"
$ git config --global color.ui true
$ git config --list
```

Git: starting a repository

```
$ git init
$ git status
```

Git Commands Conti..

Git: staging files

```
$ git add <file-name>
$ git add <file-name> <another-file-name> <yet-another-file-name>
$ git add .
$ git add --all
$ git add -A
$ git rm --cached <file-name>
$ git reset <file-name>
```

Git: committing to a repository

```
$ git commit -m "Add three files"
$ git reset --soft HEAD^
$ git commit --amend -m <enter your message>
```

Git Commands Conti..

Git: pulling and pushing from and to repositories

```
$ git remote add origin <link>
$ git push -u origin master
$ git clone <clone>
$ git pull
```

Git: branching

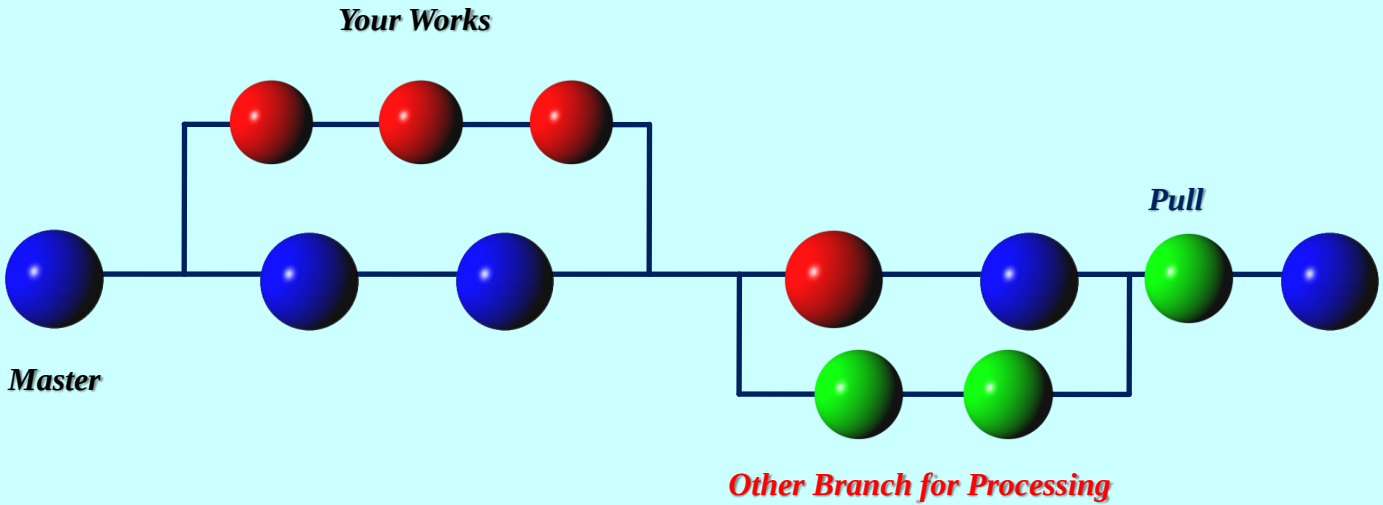
```
$ git branch
$ git branch <branch-name>
$ git checkout <branch-name>
$ git merge <branch-name>
$ git checkout -b <branch-name>
```

What is GIT?

- GIT is a version control system for tracking in computer files.
- It is used for coordinating work among several people on a project and tracking progress over time.

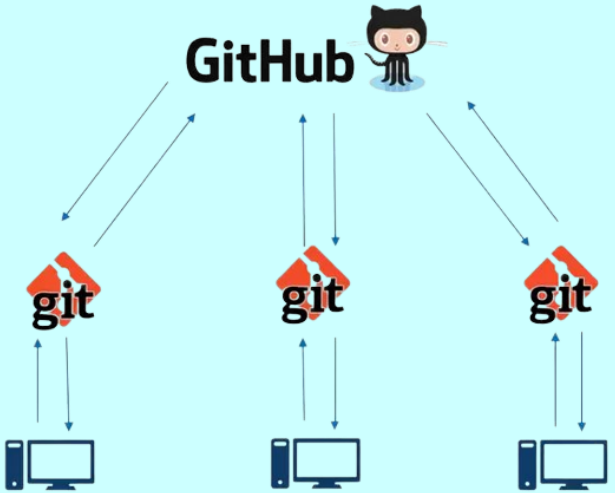
Master

What is GIT? (Conti..)



What is GITHUB ?

- GITHUB is a git repository hosting service, which provides web-based graphical interface.
- GITHUB helps every team member to work together on the project from anywhere, and makes it easy for it easy for them to collaborate.



git	GitHub
1. It is a software	1. It is a service
2. It is installed locally on the system	2. It is hosted on Web
3. It is a command line tool	3. It provides a graphical interface
4. It is a tool to manage different versions of edits, made to files in a git repository	4. It is a space to upload a copy of the **Git** repository
5. It provides functionalities like Version Control System Source Code Management	5. It provides functionalities of Git like VCS, Source Code Management as well as adding few of its own features

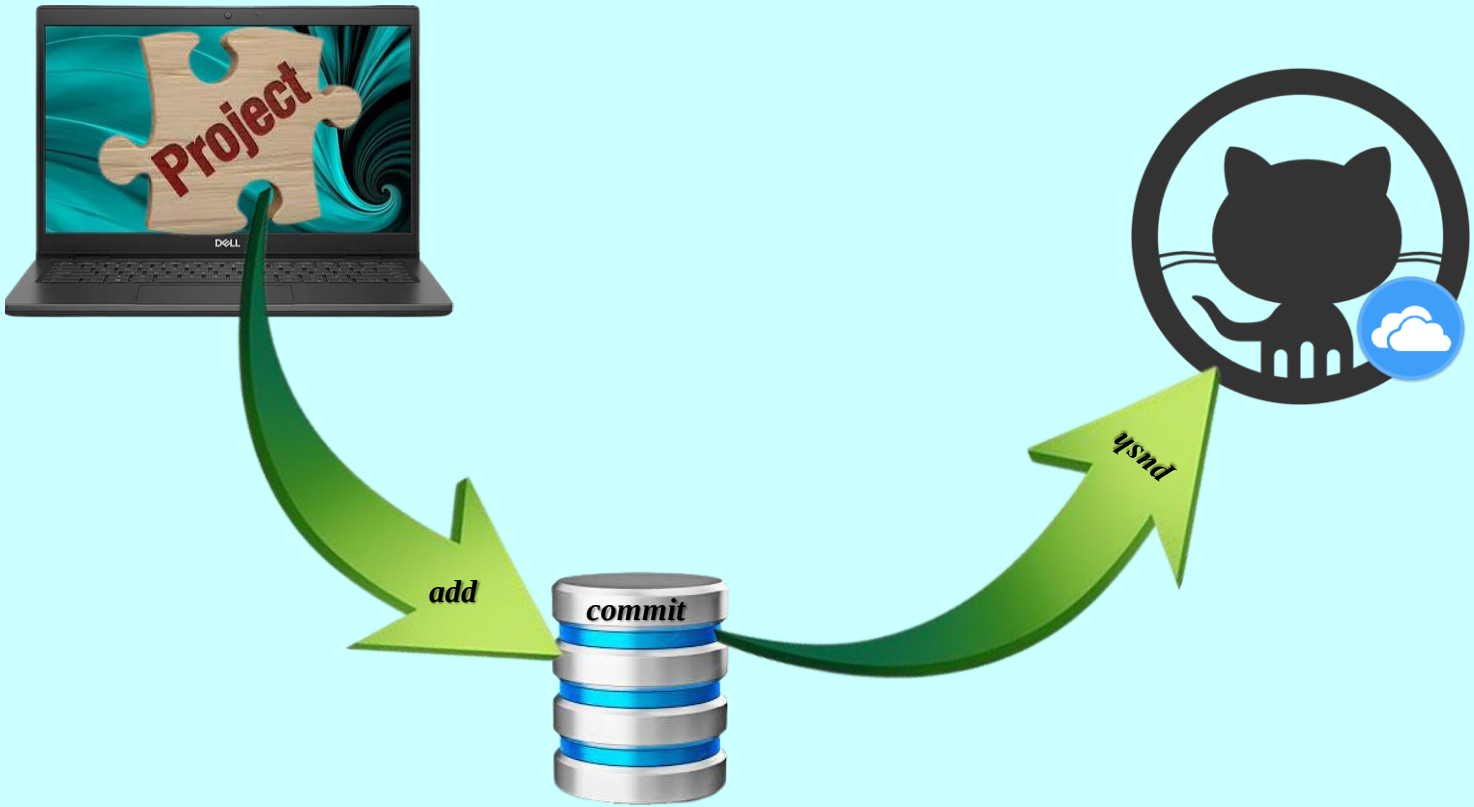
Different Commands in GIT

- git config
  - Configure the userName and Email.
- git init
  - Initialize a local git Repository.
- git add
  - Add one or more files to staging area.
- git diff
  - View the changes made to the file.
- git commit
  - Commit changes to head but not to the remote repository.
- git reset
  - Undo local changes to the state of a git repo.

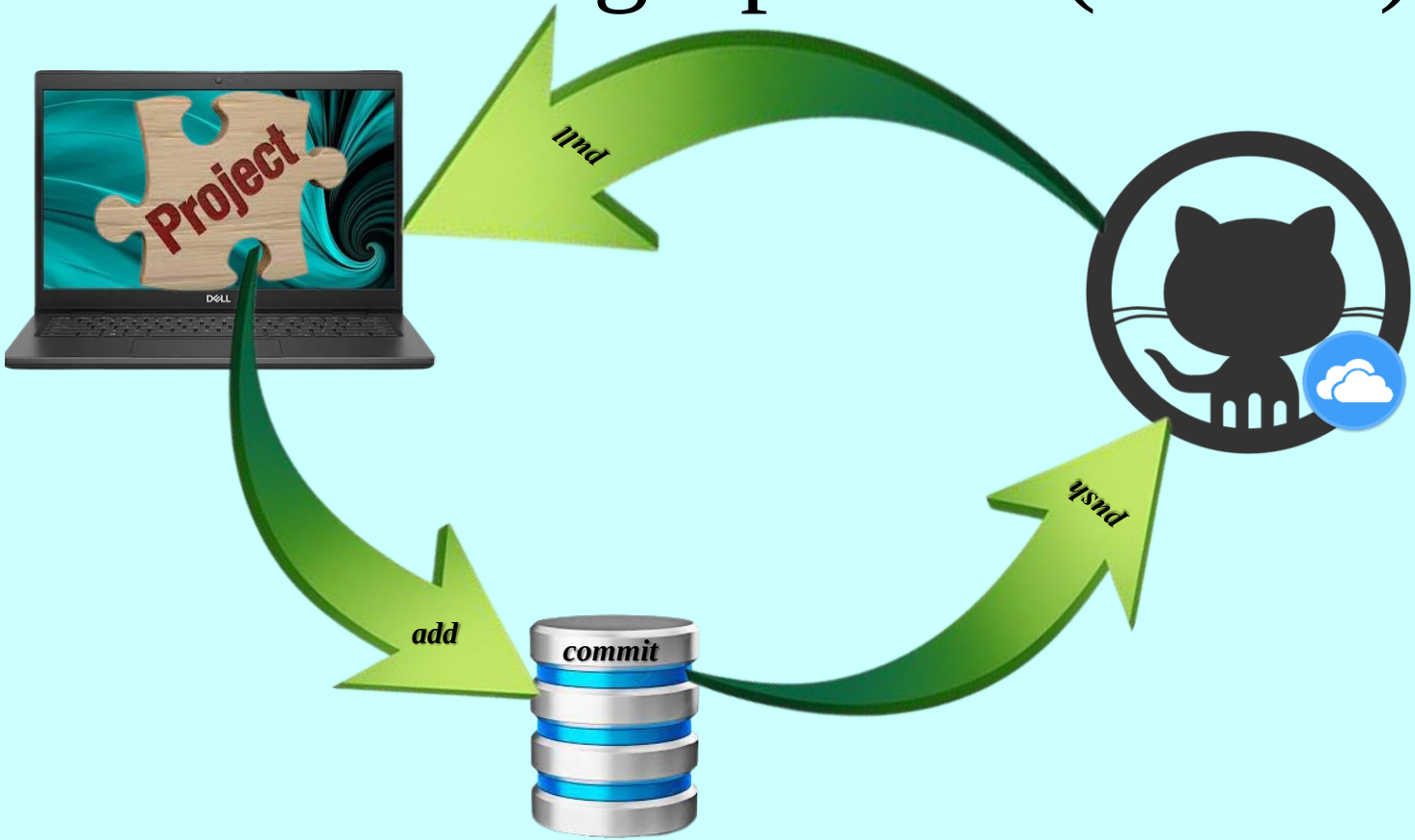
Different Commands in GIT (Conti..)

- git status
  - Displays the state of working directory and staging area.
- git merge
  - Merge a branch into an active branch.
- git push
  - Upload content from local repository to a remote repository.
- git pull
  - Fetch and Download content from a remote repository.

What is git push ?



What is git push ? (conti..)



What is git push ? (conti..)

- Git push is used the local repository content to a remote repository.
- After a repository has been modified a push is executed to share the modifications with remote team members.

Git Application

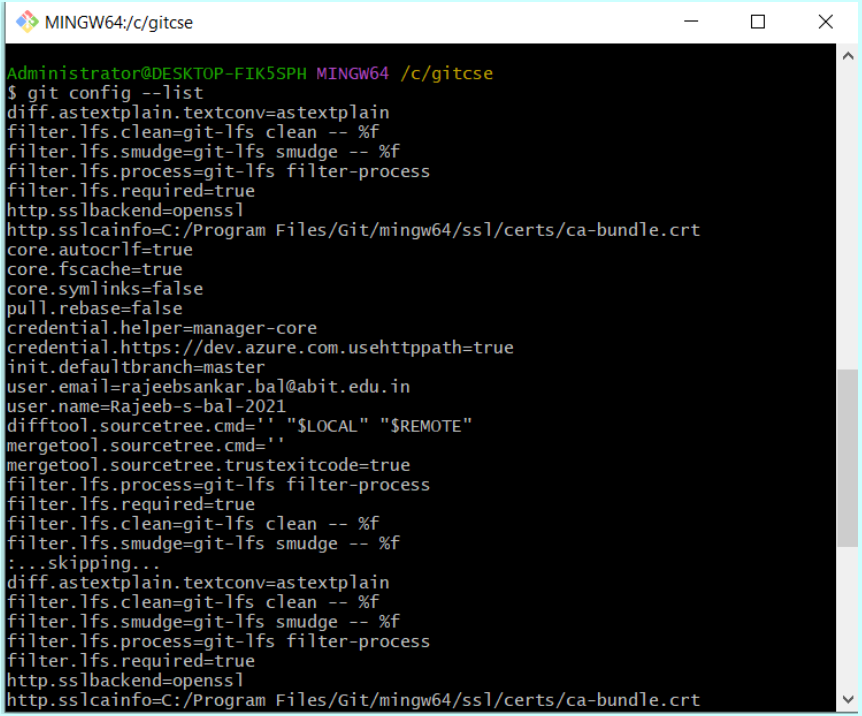
STEP:01

$ git config --global user.name "<from GITHUB>"

$ git config --global user.email "<your email>"

To Configure Your **GITHUB** Account.

Git Application



$:q # To Terminate.

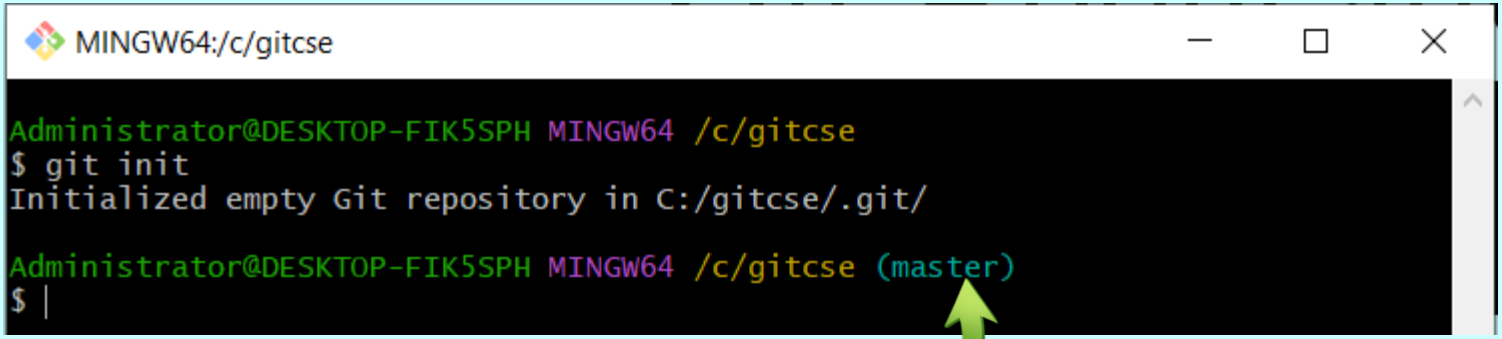
Git Application

```
Administrator@DESKTOP-FIK5SPH MINGW64 /c/gitcse
$ pwd
/c/gitcse
```

To Check **Working Directory**.

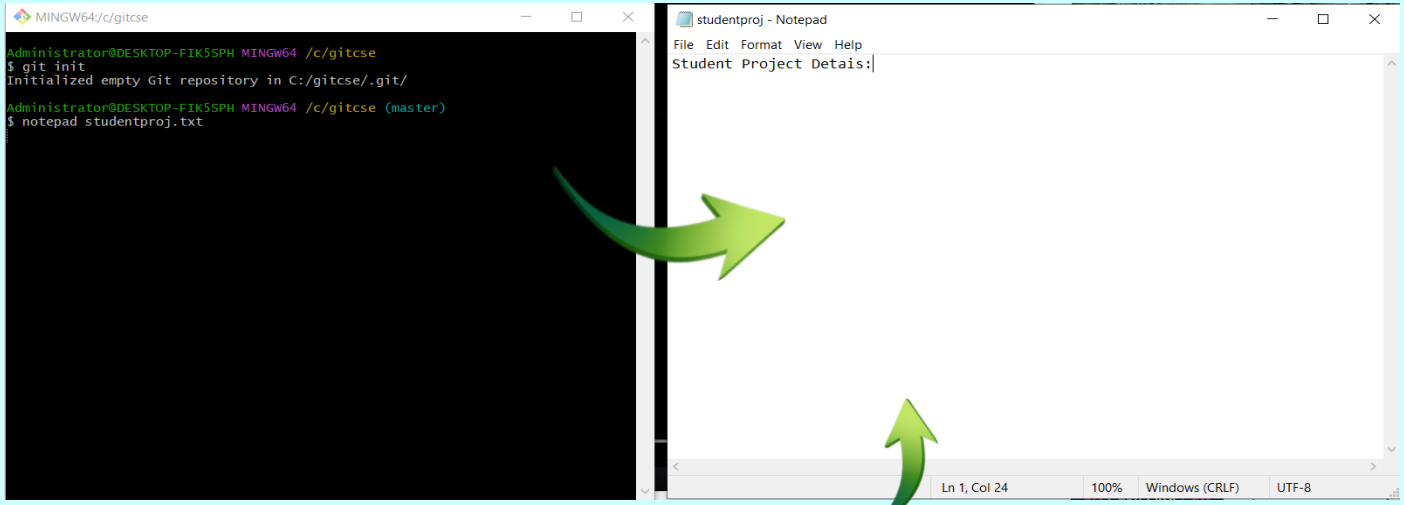
```
Administrator@DESKTOP-FIK5SPH MINGW64 /c/gitcse
$ clear
```

To Clear **$ Prompt**.

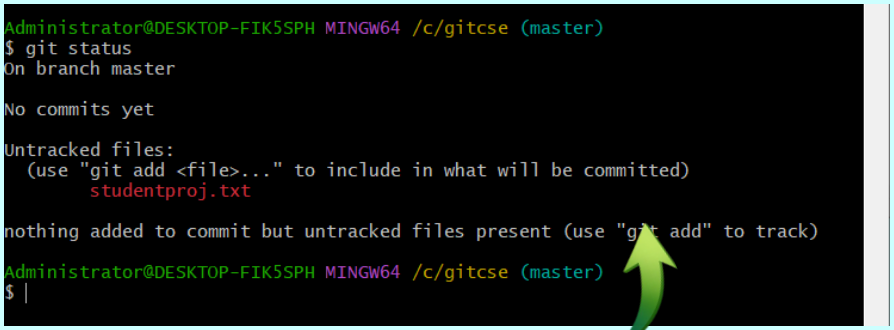


To check **Branch**.

Git Application



To save and close.



 # To check status of file.

Git Application

```
Administrator@DESKTOP-FIK5SPH MINGW64 /c/gitcse (master)
$ git add  .

Administrator@DESKTOP-FIK5SPH MINGW64 /c/gitcse (master)
$
```

 # To add files in local repository.

```
Administrator@DESKTOP-FIK5SPH MINGW64 /c/gitcse (master)
$ git add  .

Administrator@DESKTOP-FIK5SPH MINGW64 /c/gitcse (master)
$ git status
On branch master

No commits yet

Changes to be committed:
  (use "git rm --cached <file>..." to unstage)
        new file:   studentproj.txt


Administrator@DESKTOP-FIK5SPH MINGW64 /c/gitcse (master)
$
```

 # To check of status of files in local repository.

Git Application

```
Administrator@DESKTOP-FIK5SPH MINGW64 /c/gitcse (master)
$ git commit -m "First project Info"
[master (root-commit) 7bf285c] First project Info
 1 file changed, 1 insertion(+)
 create mode 100644 studentp[illegible].txt

Administrator@DESKTOP-FIK5SPH MINGW64 /c/gitcse (master)
$
```

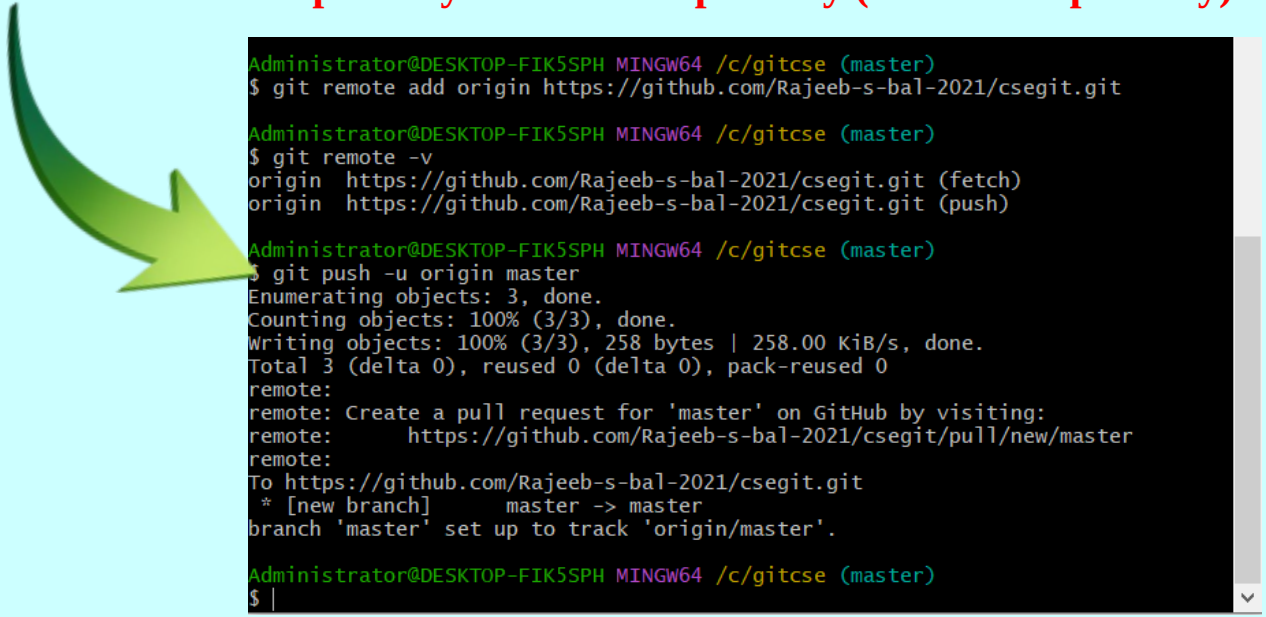
 # To commit files in local repository.

```
Administrator@DESKTOP-FIK5SPH MINGW64 /c/gitcse (master)
$ git log
commit 7bf285c413f94a63734c9a93af26c5415649d4ac (HEAD -> master)
Author: Rajeeb-s-bal-2021 <raje[illegible]sankar.bal@abit.edu.in>
Date:   Sun Oct 29 20:18:02 202[illegible]0530

    First project Info

Administrator@DESKTOP-FIK5SPH M[illegible]GW64 /c/gitcse (master)
$
```

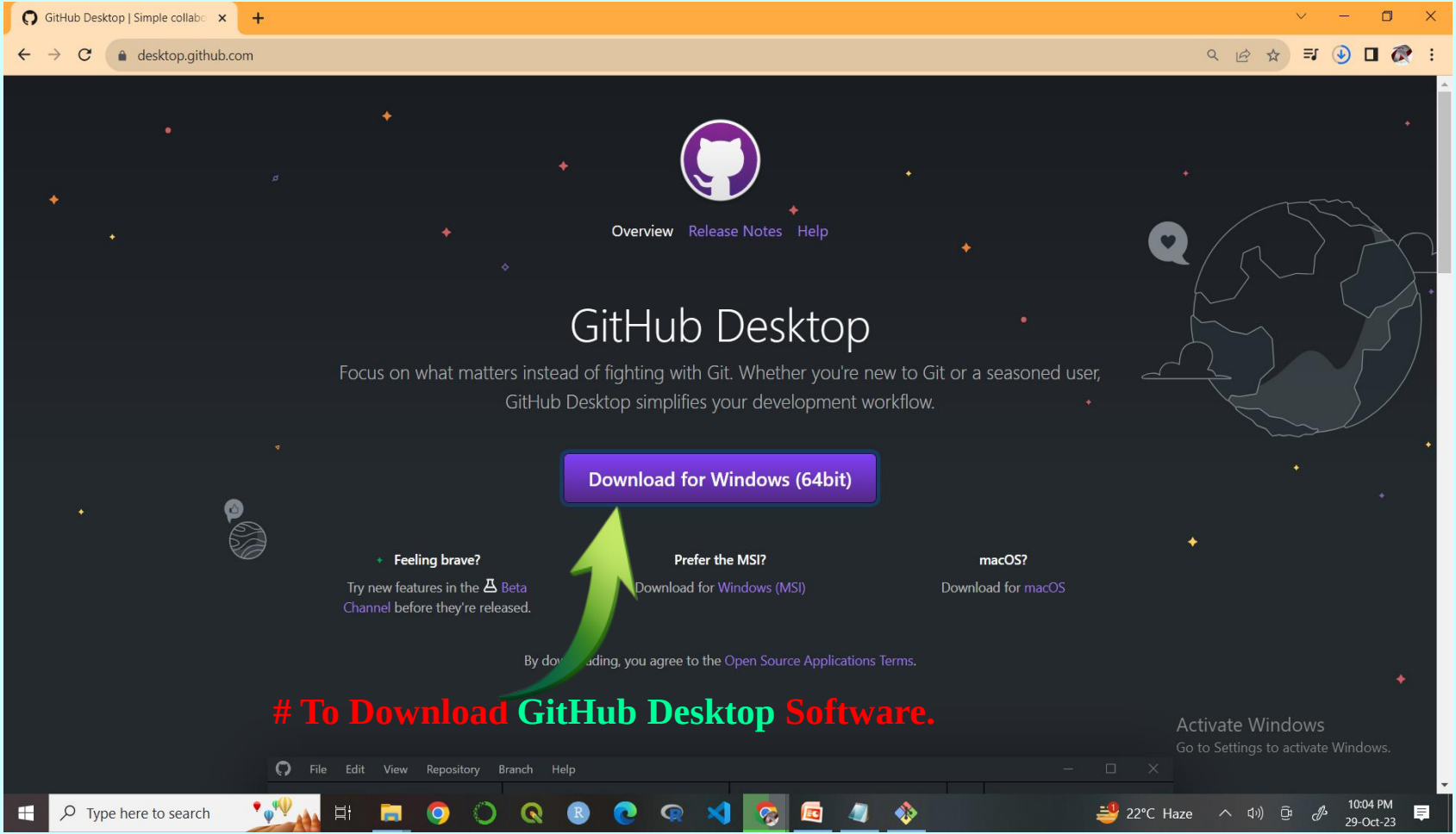
 # To log for commit ID. in local repository.

Git Application

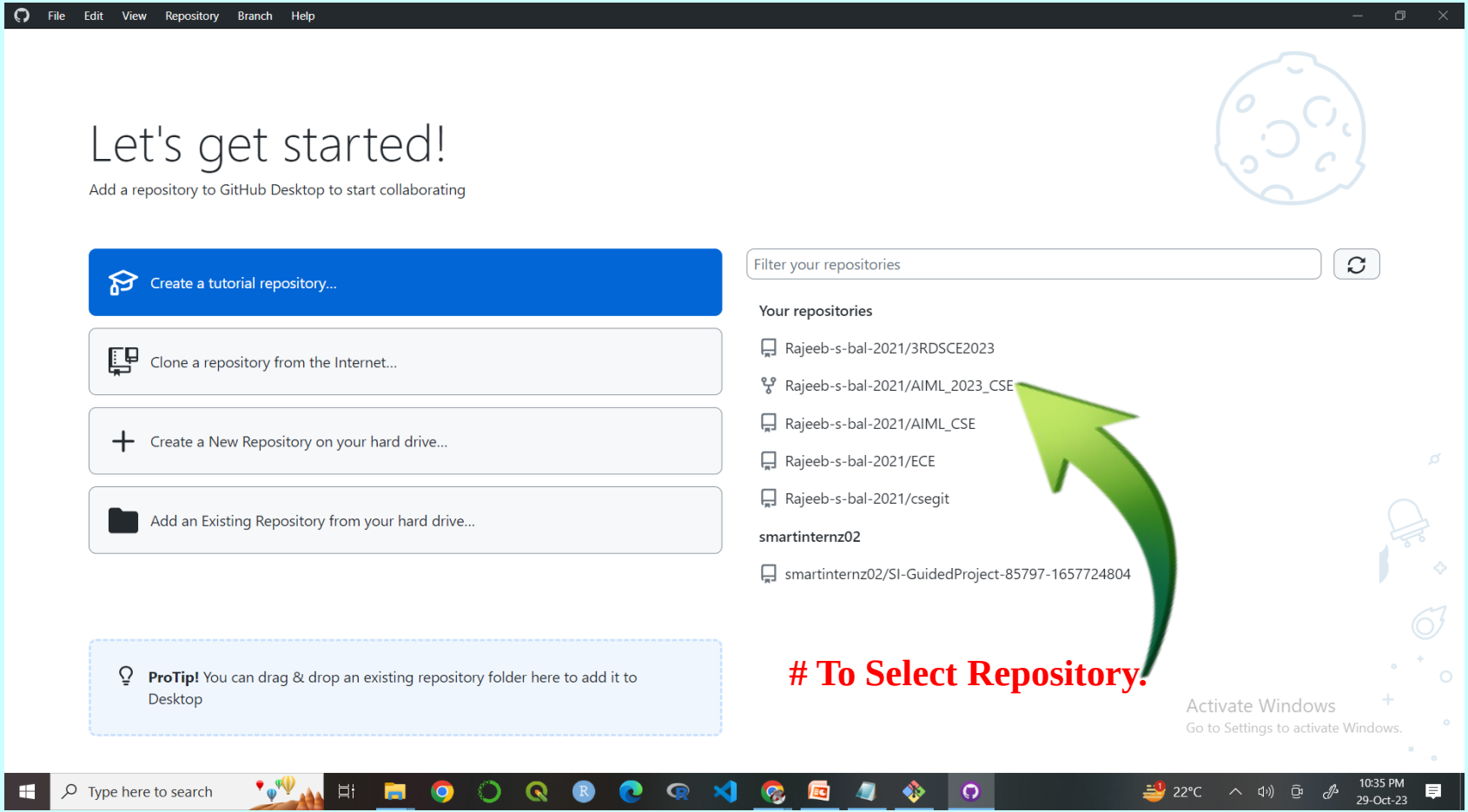
 # To push from local repository to remote repository (GitHub Repository).



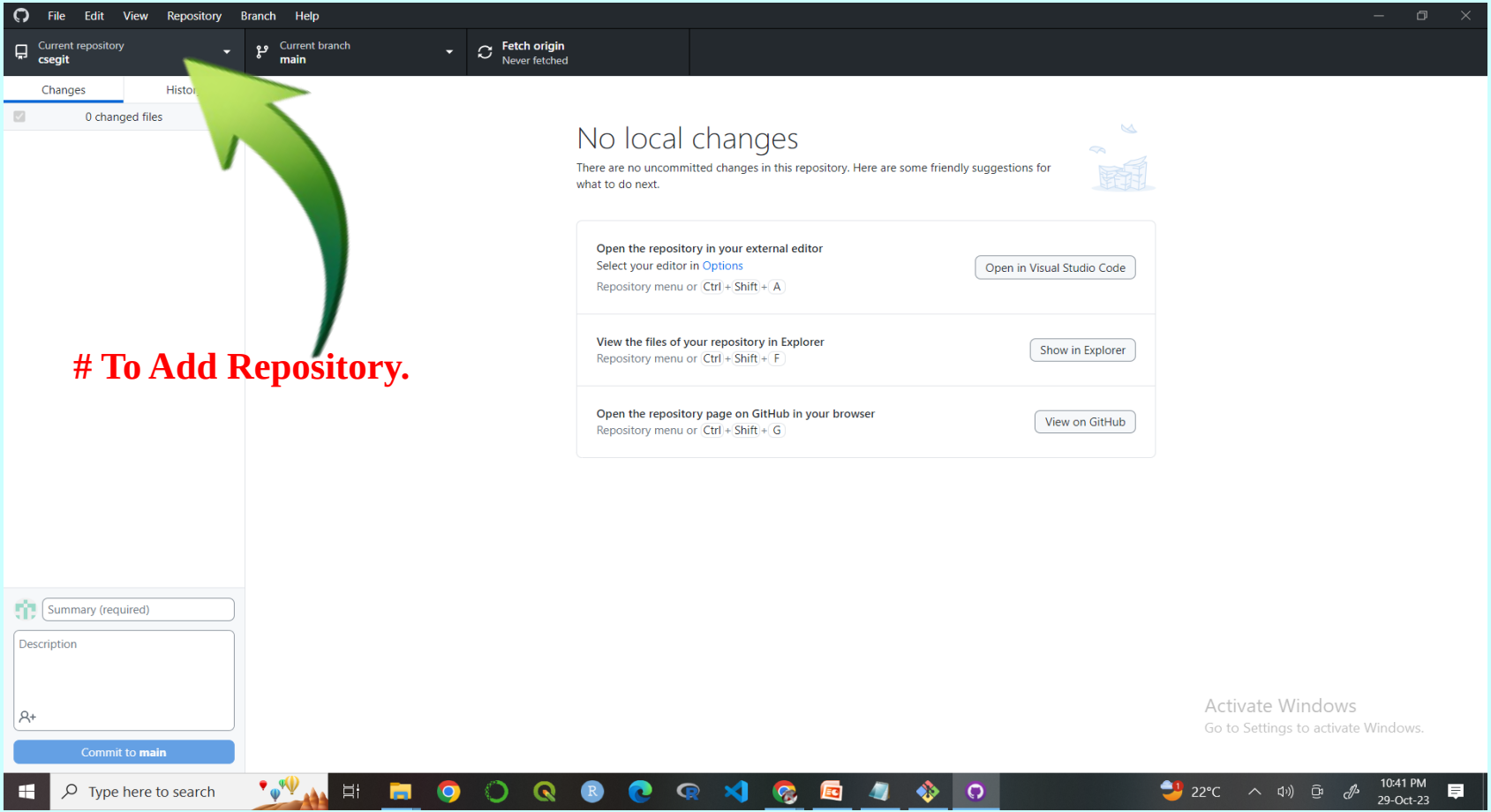
GitHub Desktop Application



GitHub Desktop Application



GitHub Desktop Application



To Add Repository.