

Center for Applied Research

Rajiv

Department of Computer Science Engineering
AJAY BINAY INST. OF TECH

Git Group



git



GitHub

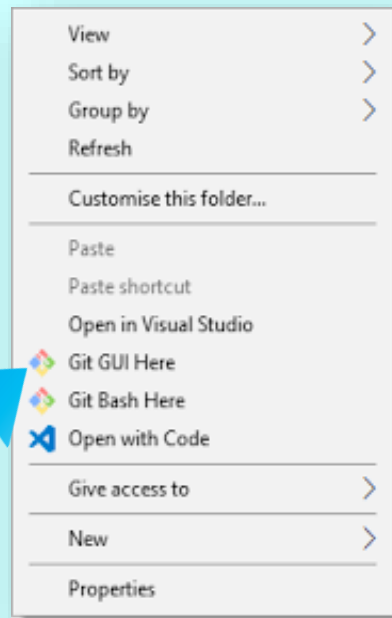


GitLab

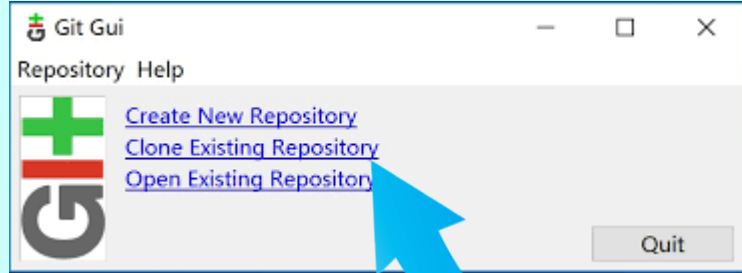
What is **git** ?

- 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

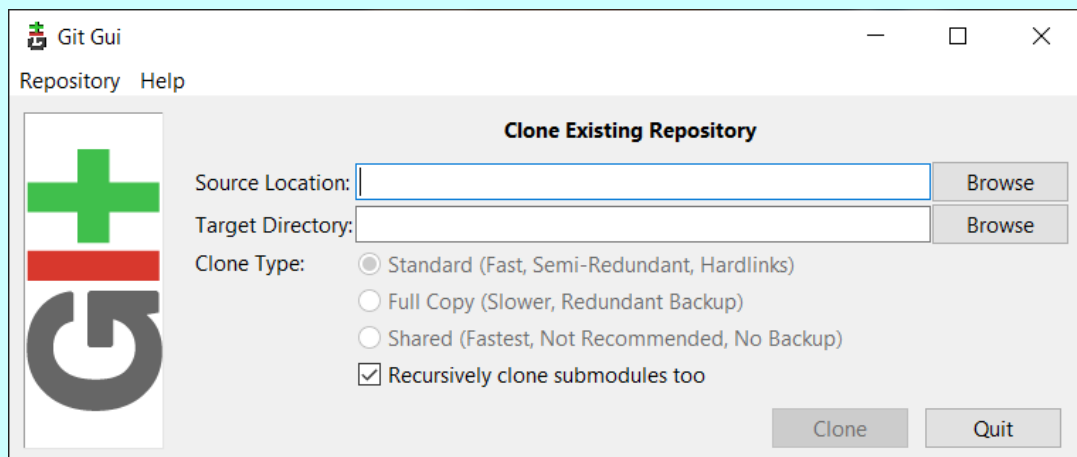


git Conti..



Click on Git GUI

git Conti..



What is **GitHub** ?

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

GitHub Conti..

New repository

github.com/new

Create a new repository

A repository contains all project files, including the revision history. Already have a project repository elsewhere? [Import a repository.](#)

Required fields are marked with an asterisk (*).

Owner *

Rajeeb-s-bal-2021

Repository name *

3RD CSE

✔ Your new repository will be created as 3RD-CSE.
The repository name can only contain ASCII letters, digits, and the characters ., -, and _.

Great repository names are short and memorable. Need inspiration? How about [probable-engine](#) ?

Description (optional)

☒ Public

Anyone on the internet can see this repository. You choose who can commit.

☐ Private

You choose who can see and commit to this repository.

Initialize this repository with:

☐ Add a README file

This is where you can write a long description for your project. [Learn more about READMEs.](#)

Add .gitignore

.gitignore template: None

Choose which files not to track from a list of templates. [Learn more about ignoring files.](#)

Choose a license

License: None

A license tells others what they can and can't do with your code. [Learn more about licenses.](#)

📘 You are creating a public repository in your personal account.

Create repository

Type here to search

30°C 11:42 AM 28-Oct-23

GitHub Conti..

The screenshot shows a web browser window displaying a GitHub repository page for '3rdCSE23'. The browser's address bar shows the URL 'github.com/Rajeeb-s-bal-2021/3rdCSE23'. The repository page has a header with the repository name '3rdCSE23' and a 'Public' label. Below the header, there are tabs for 'main' (selected), '1 branch', and '0 tags'. A commit history table shows one commit by 'Rajeeb-s-bal-2021' with the message 'Initial commit' and a file 'README.md'. The 'README.md' content is displayed below the commit, showing the repository name '3rdCSE23' and the description 'WEB APPLICATION'. On the right side, there is an 'About' section with a 'WEB APPLICATION' title and a list of links: 'Readme', 'Activity', '0 stars', '1 watching', and '0 forks'. Below this, there is a 'Releases' section with the text 'No releases published' and a link 'Create a new release'. At the bottom, there is a 'Packages' section with the text 'No packages published' and a link 'Publish your first package'. The footer of the page shows the GitHub logo, copyright information '© 2023 GitHub, Inc.', and a list of links: 'Terms', 'Privacy', 'Security', 'Status', 'Docs', 'Contact GitHub', 'Pricing', 'API', 'Training', 'Blog', and 'About'.

Rajeeb-s-bal-2021 / 3rdCSE23

Code Issues Pull requests Actions Projects Wiki Security Insights Settings

3rdCSE23 Public

main 1 branch 0 tags

Go to file Add file <> Code

Rajeeb-s-bal-2021 Initial commit 1ca8f3c 13 minutes ago 1 commit

README.md Initial commit 13 minutes ago

README.md

3rdCSE23

WEB APPLICATION

About

WEB APPLICATION

Readme Activity 0 stars 1 watching 0 forks

Releases

No releases published [Create a new release](#)

Packages

No packages published [Publish your first package](#)

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GitHub Conti..

The screenshot shows a web browser displaying the GitHub repository page for 'Rajeeb-s-bal-2021 / 3rdCSE23'. The repository is public and has 1 branch and 0 tags. The 'Code' dropdown menu is open, showing options to clone the repository using HTTPS, SSH, or GitHub CLI. The HTTPS link is highlighted, and a blue arrow points to it with the text 'Copy the HTTPS link'. The repository description is '3rdCSE23' and it is a 'WEB APPLICATION'. The footer of the page shows '© 2023 GitHub, Inc.' and various links like Terms, Privacy, Security, Status, Docs, Contact GitHub, Pricing, API, Training, Blog, and About. A Windows watermark is visible in the bottom right corner.

3rdCSE23 (Public)

main 1 branch 0 tags

Rajeeb-s-bal-2021 Initial commit

README.md Initial commit

README.md

3rdCSE23

WEB APPLICATION

Clone

Local Codespaces

HTTPS SSH GitHub CLI

<https://github.com/Rajeeb-s-bal-2021/3rdCSE23>

Use Git or checkout with SVN using the web URL.

Open with GitHub Desktop

Download ZIP

Code 55% faster with AI pair programming.

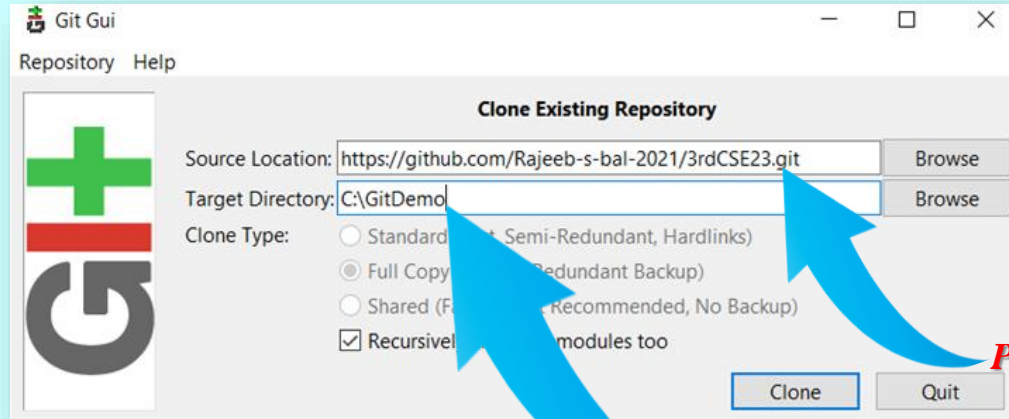
Start my free trial Don't show again

Copy the HTTPS link

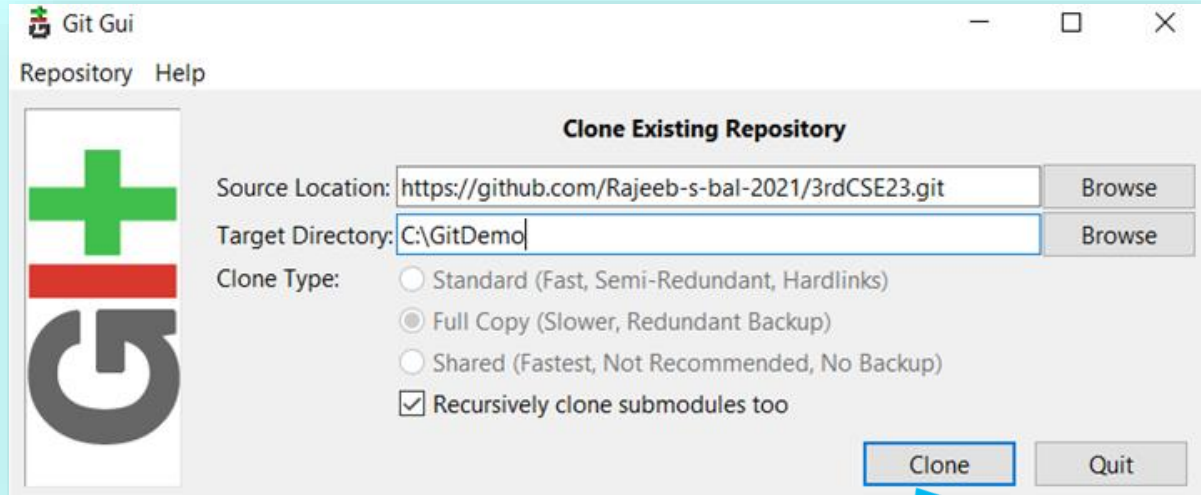
© 2023 GitHub, Inc. Terms Privacy Security Status Docs Contact GitHub Pricing API Training Blog About

Activate Windows
Go to Settings to activate Windows.

Git Gui Conti..

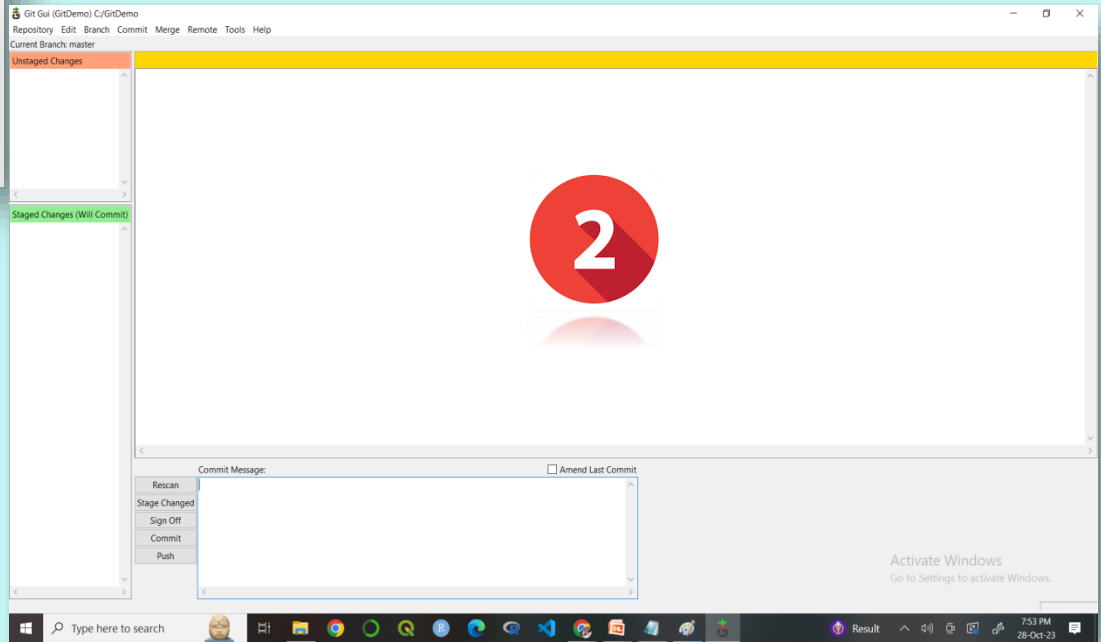


Git Gui Conti..

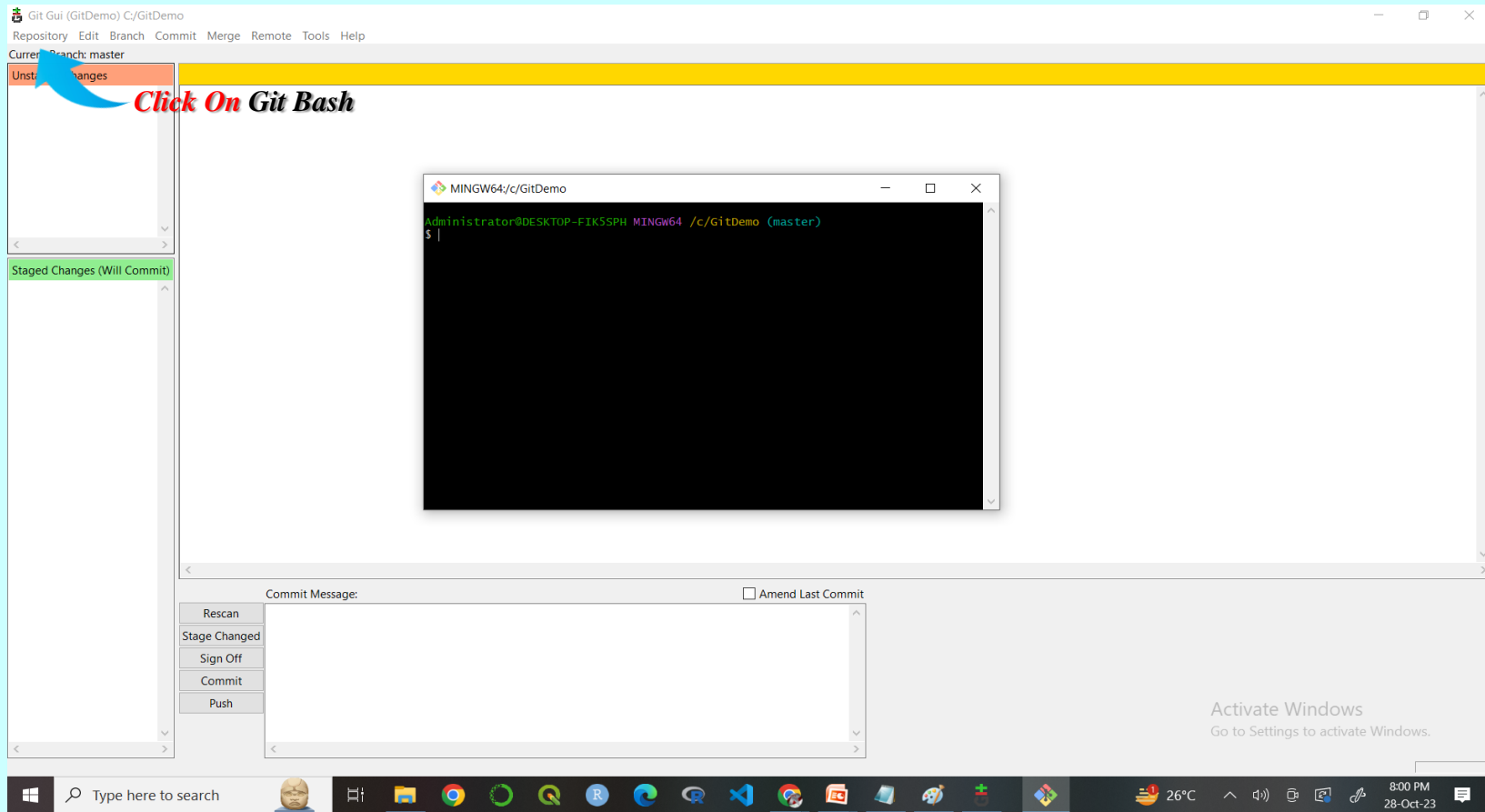


Click On Clone Button

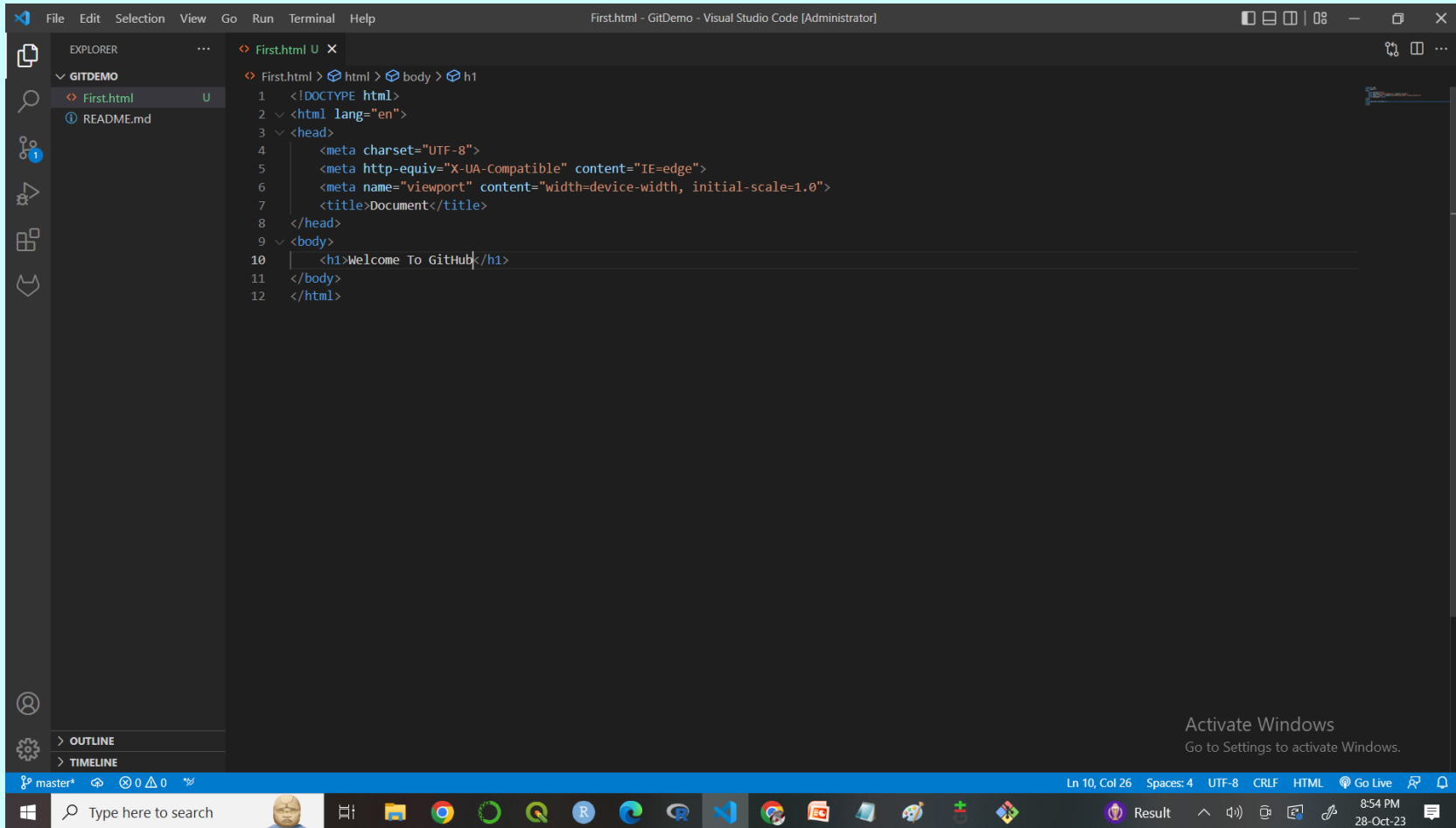
Git Gui Conti..



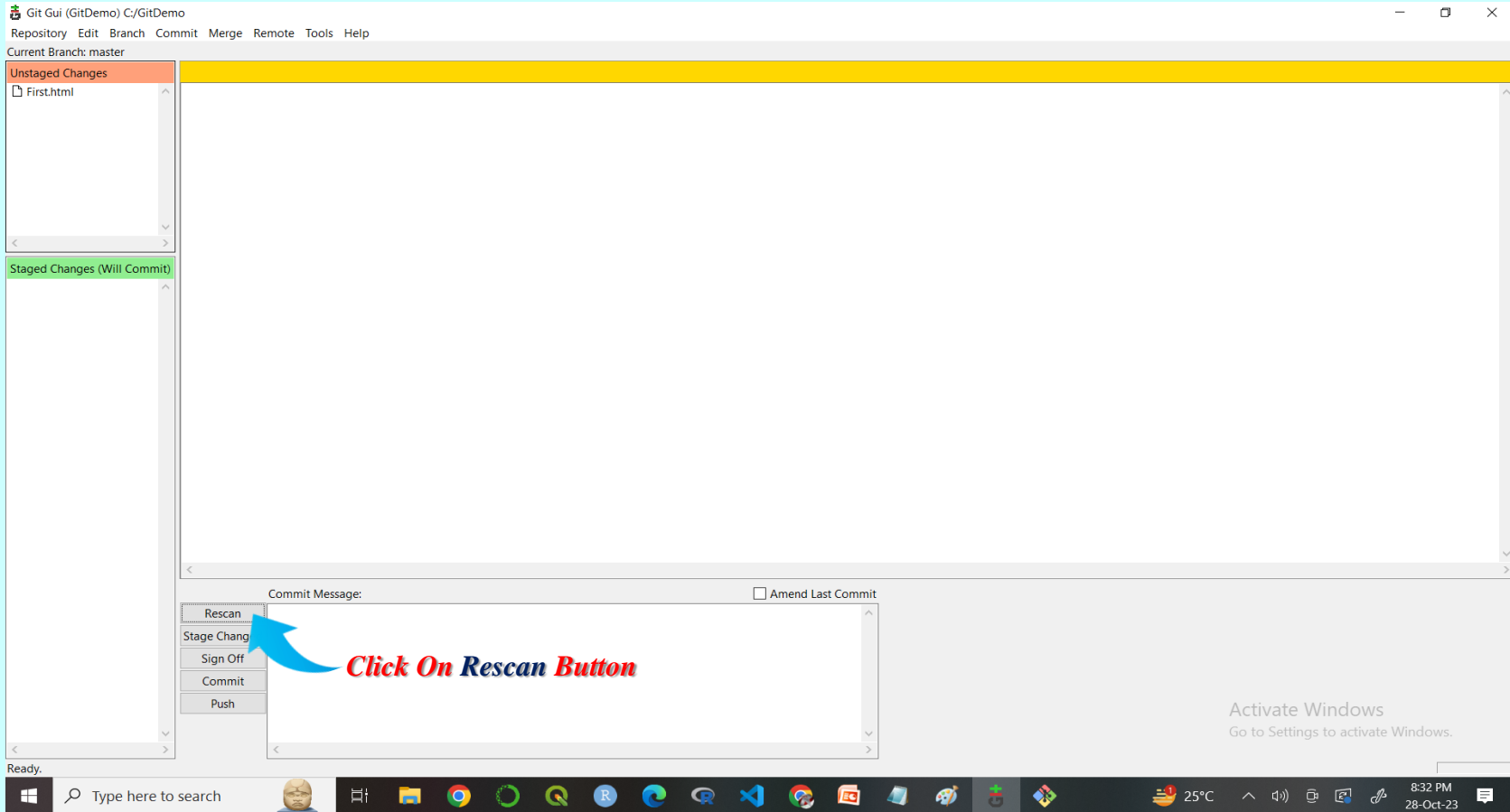
Git Gui Conti..



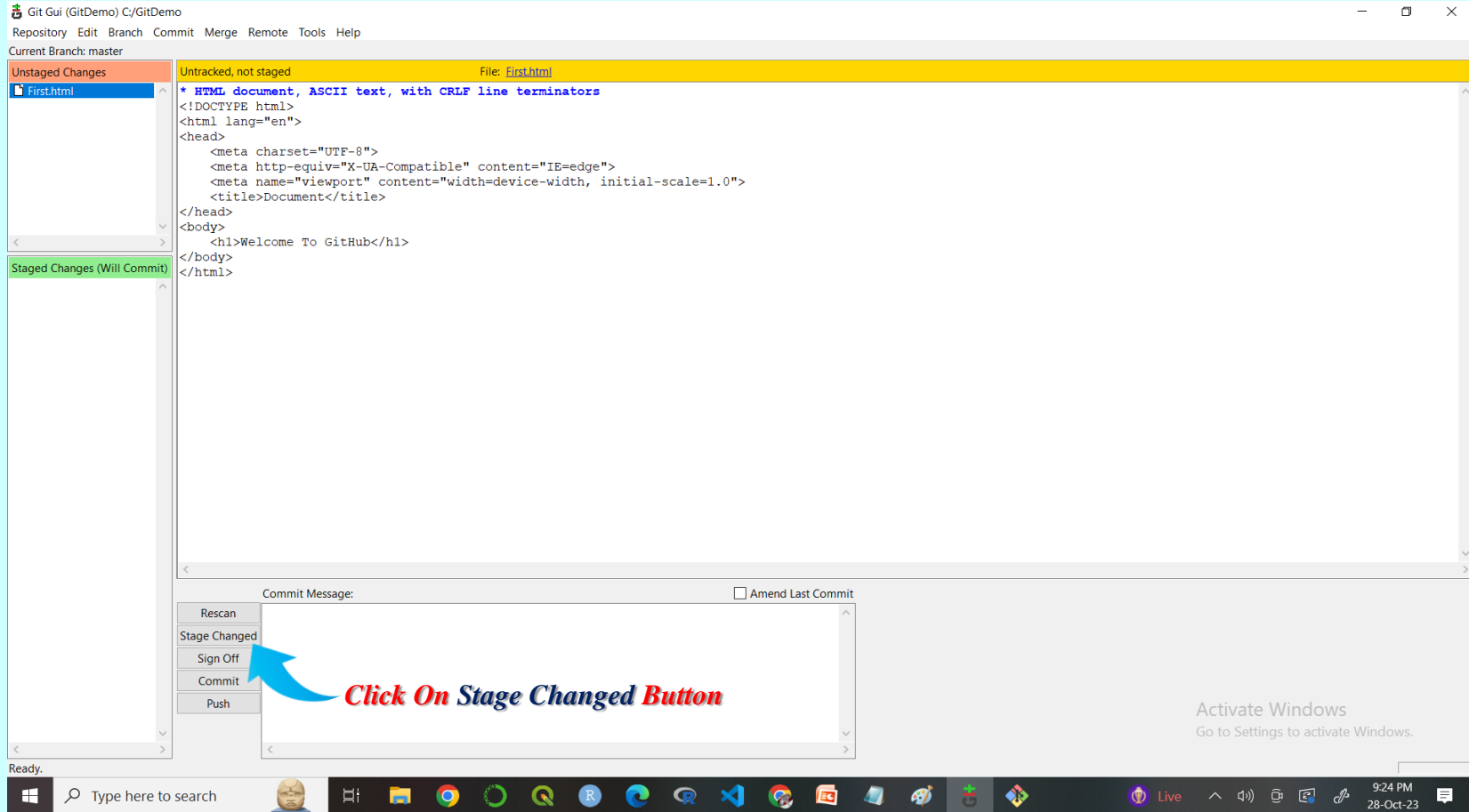
Git Gui Conti..



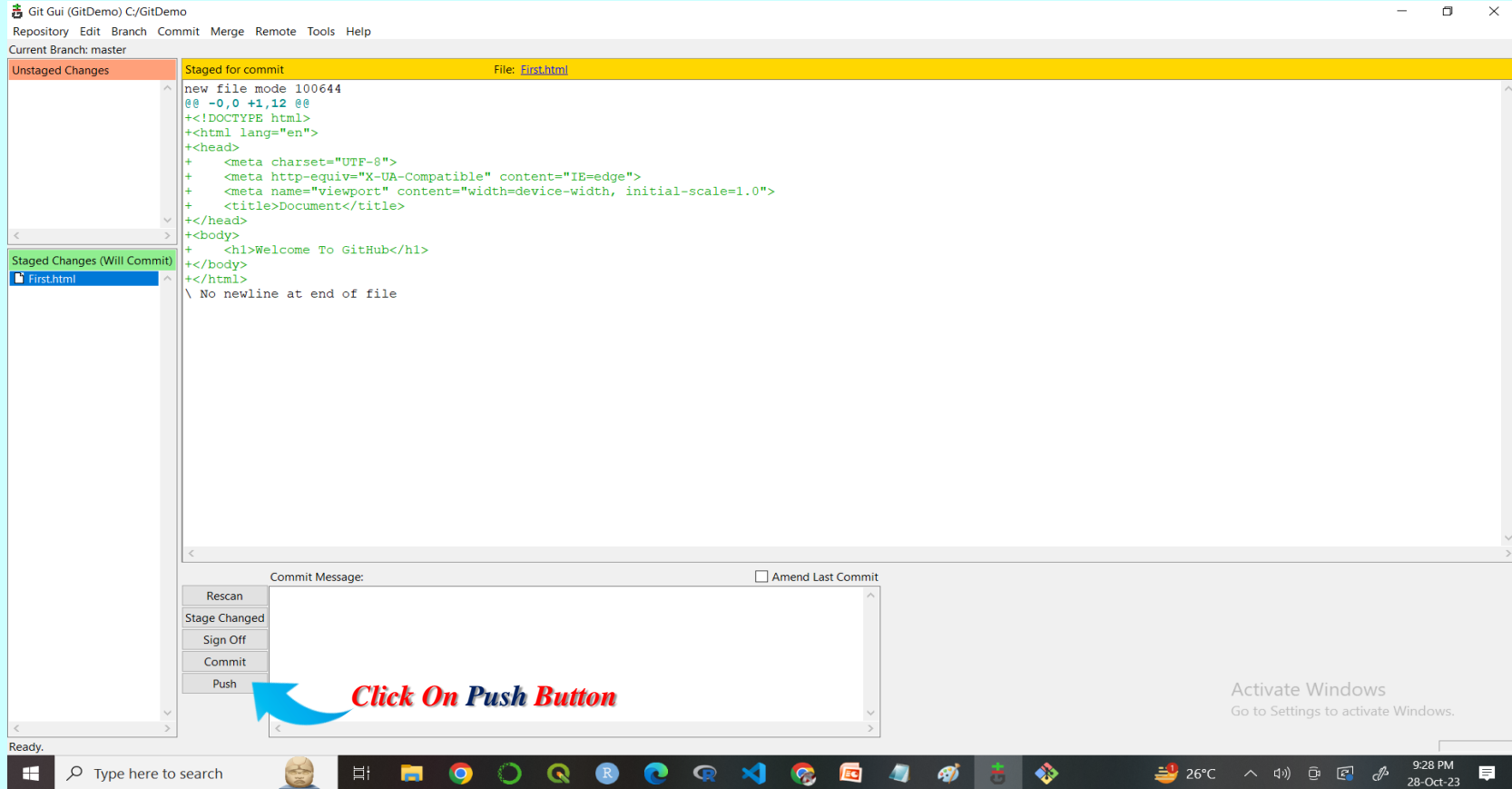
Git Gui Conti..



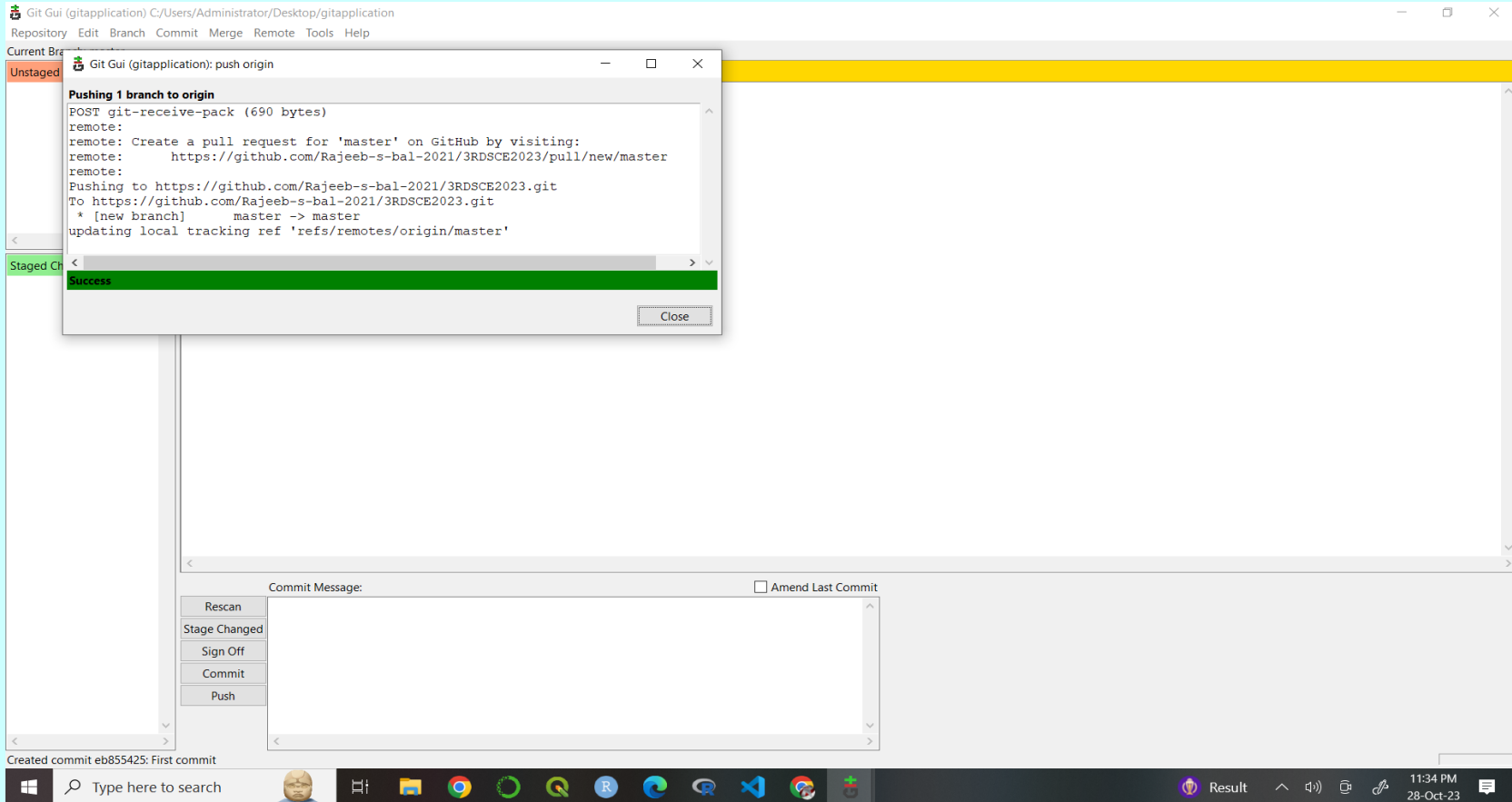
Git Gui Conti..



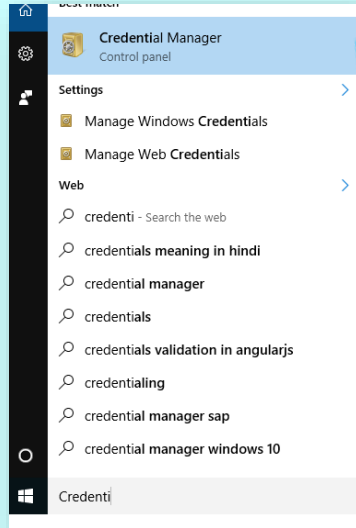
Git Gui Conti..



Git Gui Conti..

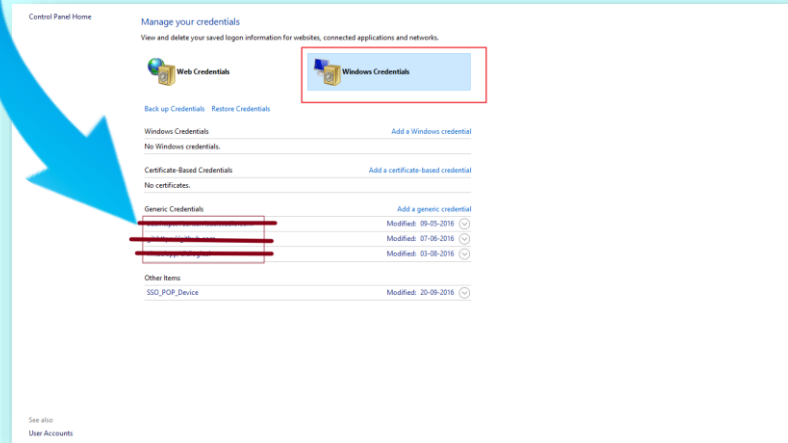


Error in Git Gui Conti..



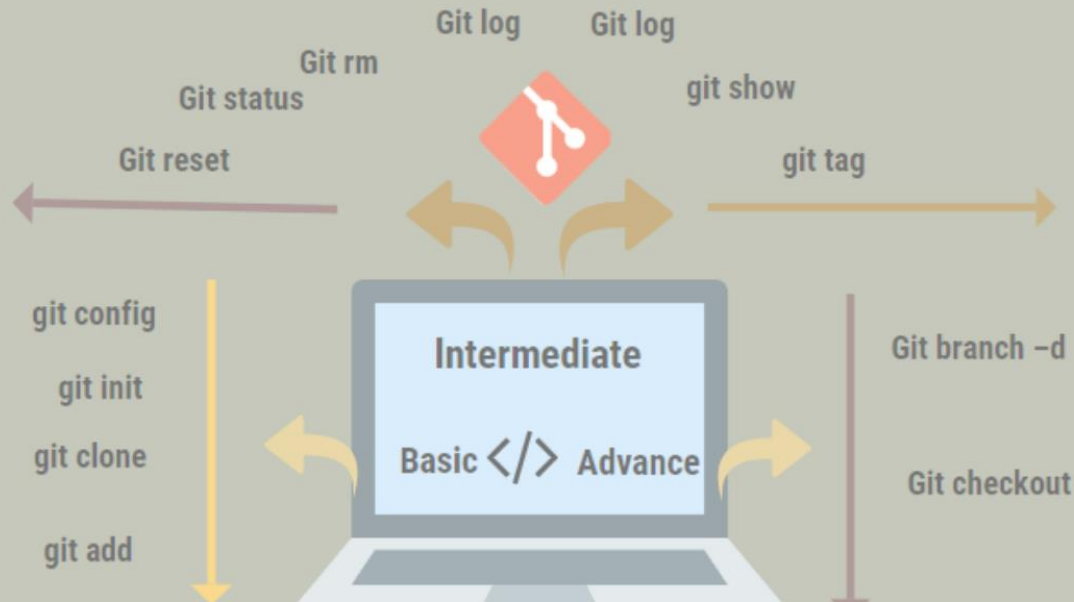
-
-

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





GIT Commands



Git Commands 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

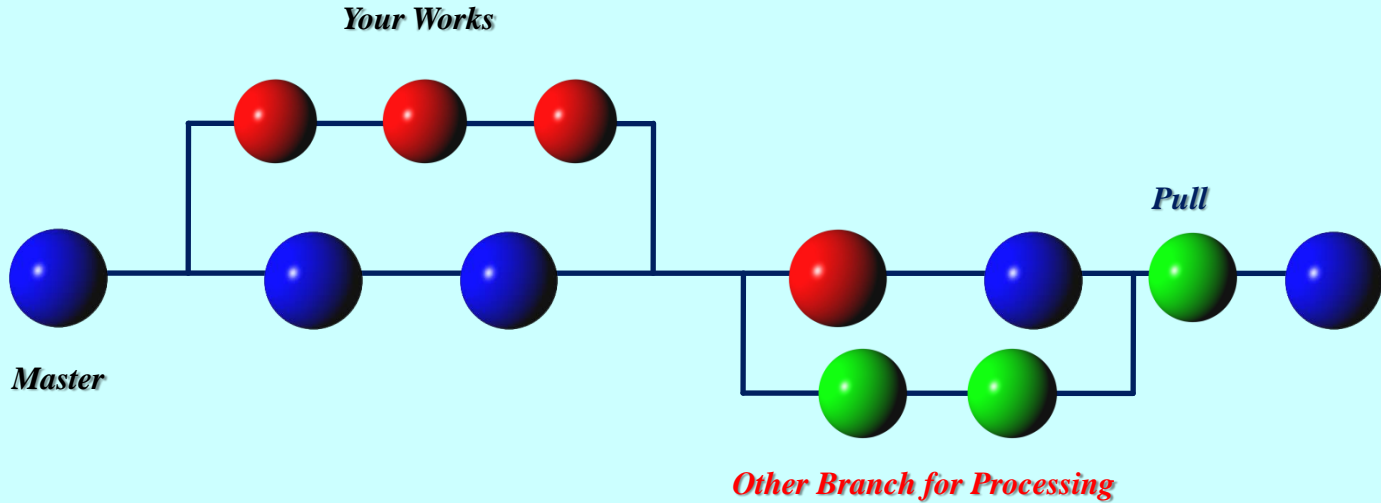
```
$ git branch  
$ git branch <branch-name>  
$ git checkout <branch-name>  
$ git merge <branch-name>  
$ git checkout -b <branch-name>
```


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.

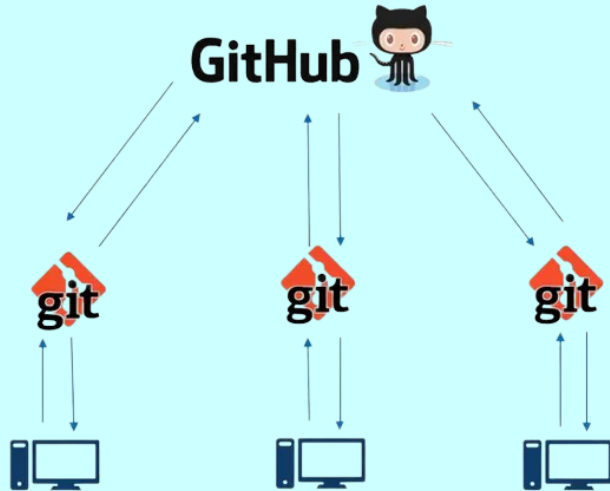




What is GIT? (Conti..)



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

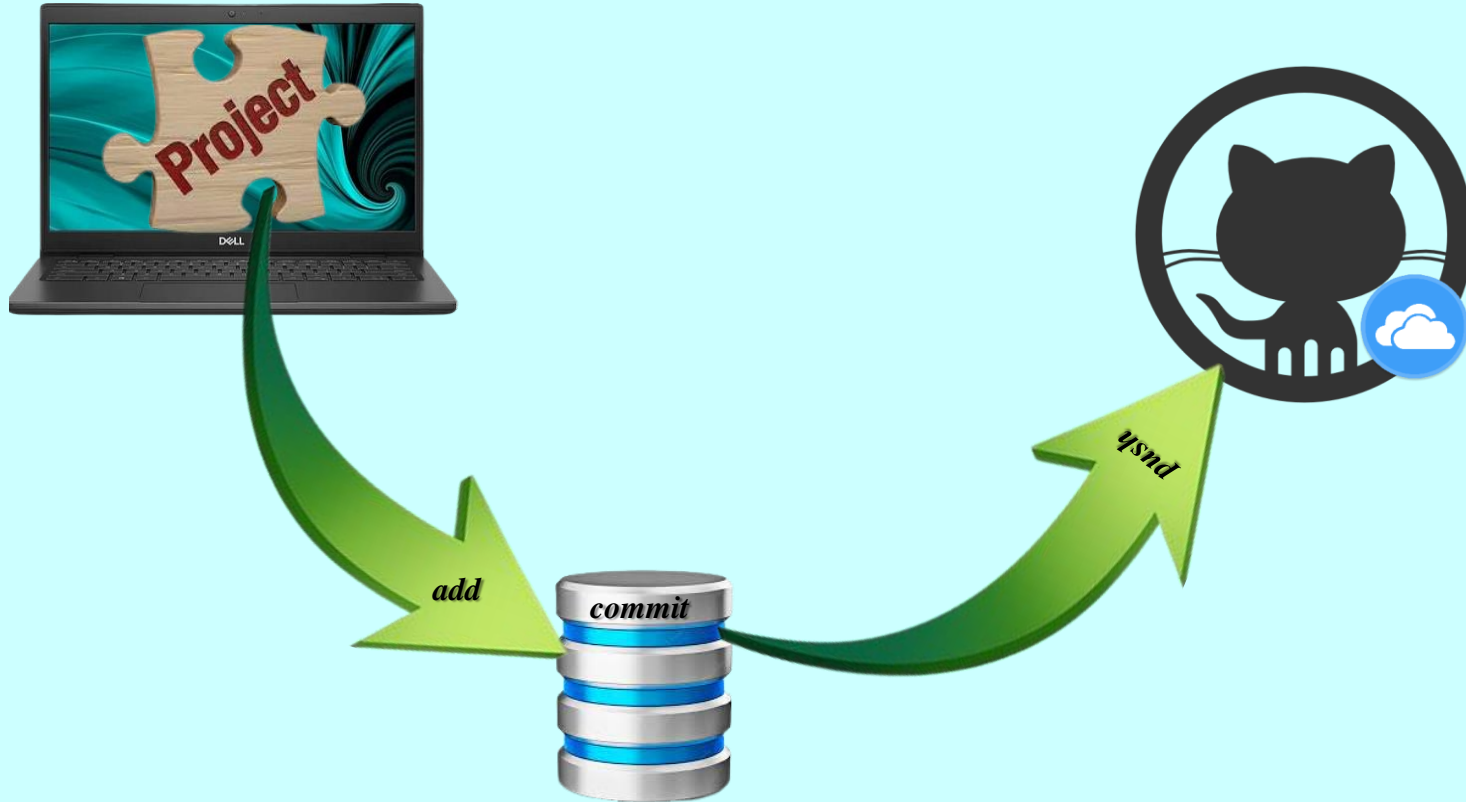
Different Commands in GIT

- 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.

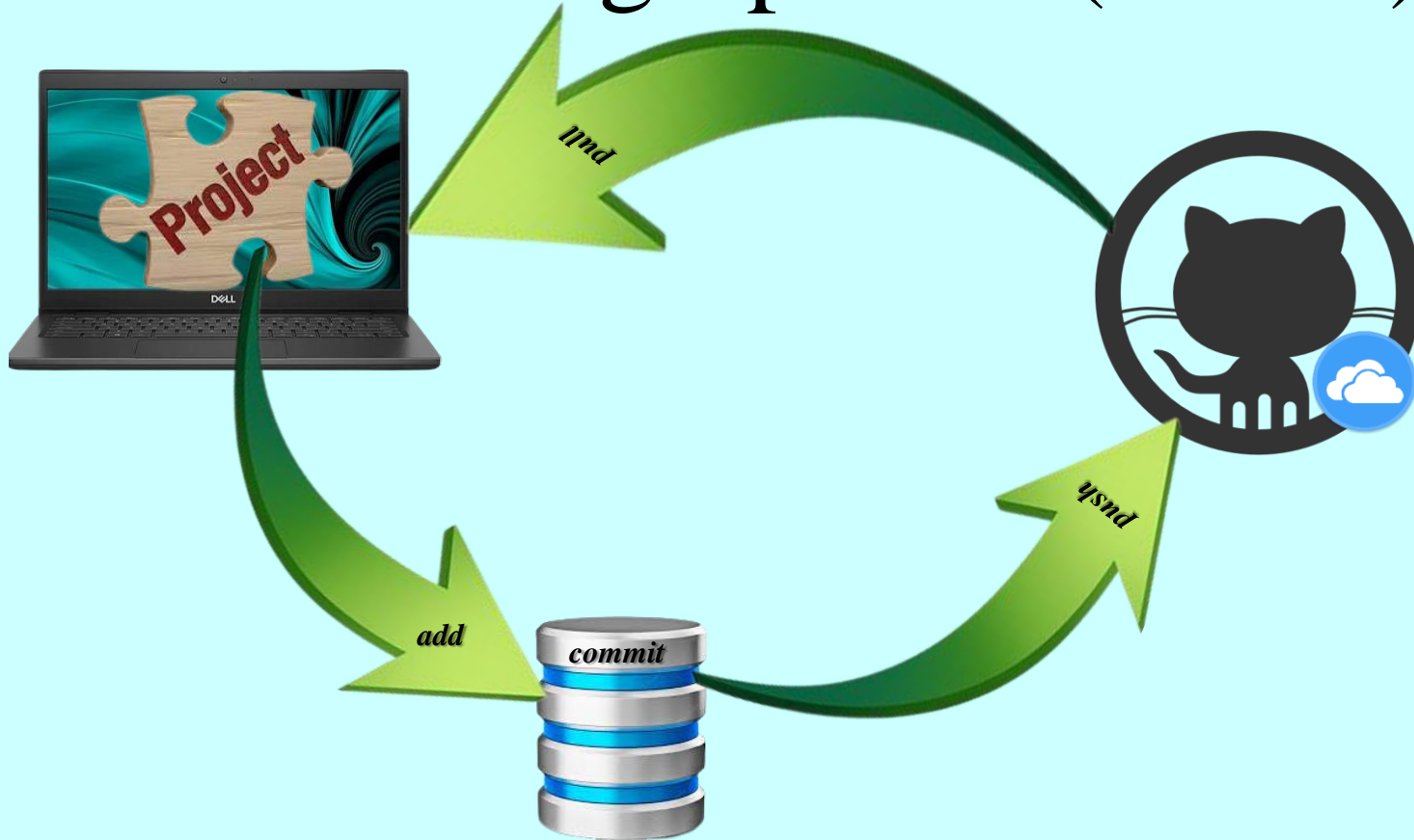
Different Commands in GIT (Conti..)

- 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..)

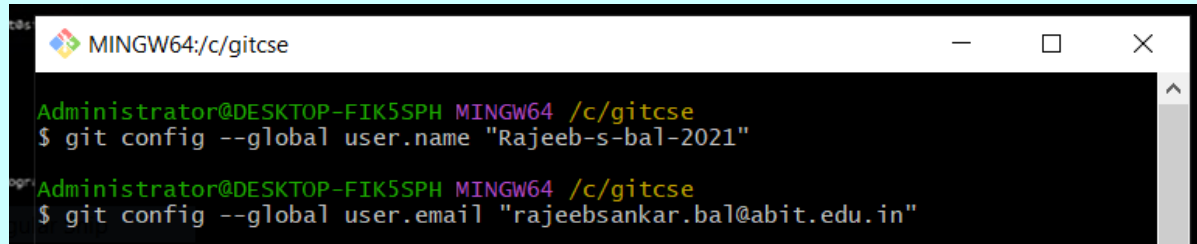
- Git push is used to push the local repository content to a remote repository.
- After a repository has been modified a push is executed to share the modifications with remote team members.

Git Application

STEP:01

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

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

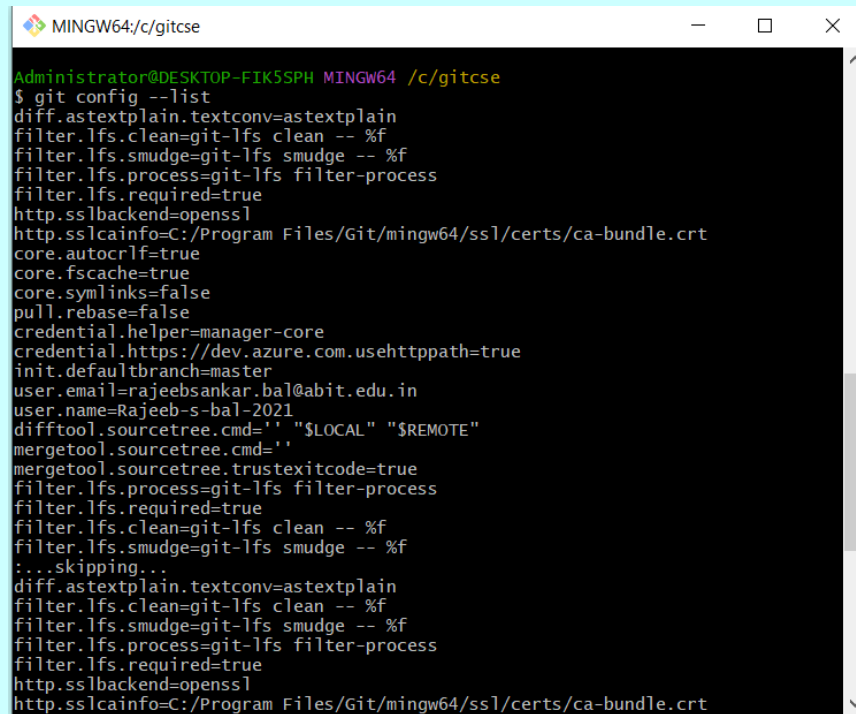
A screenshot of a Windows command prompt window titled "MINGW64:/c/gitcse". The window has a black background with green and yellow text. It shows two lines of commands being entered: "Administrator@DESKTOP-FIK5SPH MINGW64 /c/gitcse" followed by "\$ git config --global user.name 'Rajeeb-s-bal-2021'", and then "Administrator@DESKTOP-FIK5SPH MINGW64 /c/gitcse" followed by "\$ git config --global user.email 'rajeeksankar.bal@abit.edu.in'".

```
Administrator@DESKTOP-FIK5SPH MINGW64 /c/gitcse
$ git config --global user.name "Rajeeb-s-bal-2021"

Administrator@DESKTOP-FIK5SPH MINGW64 /c/gitcse
$ git config --global user.email "rajeeksankar.bal@abit.edu.in"
```

To Configure Your **GITHUB** Account.

Git Application

A screenshot of a terminal window titled 'MINGW64:/c/gitcse'. The prompt is 'Administrator@DESKTOP-FIK5SPH MINGW64 /c/gitcse'. The command '\$ git config --list' has been executed, and the output is displayed. The output lists various Git configuration settings, including diff, filter, http, core, credential, and user settings. The settings are repeated twice in the screenshot.

```
MINGW64:/c/gitcse
Administrator@DESKTOP-FIK5SPH MINGW64 /c/gitcse
$ git config --list
diff.astextplain.textconv=astextplain
filter.lfs.clean=git-lfs clean -- %f
filter.lfs.smudge=git-lfs smudge -- %f
filter.lfs.process=git-lfs filter-process
filter.lfs.required=true
http.sslbackend=openssl
http.sslcainfo=C:/Program Files/Git/mingw64/ssl/certs/ca-bundle.crt
core.autocrlf=true
core.fscache=true
core.symlinks=false
pull.rebase=false
credential.helper=manager-core
credential.https://dev.azure.com.usehttppath=true
init.defaultbranch=master
user.email=rajebsankar.bal@abit.edu.in
user.name=Rajeeb-s-bal-2021
difftool.sourcetree.cmd='' "$LOCAL" "$REMOTE"
mergetool.sourcetree.cmd=''
mergetool.sourcetree.trustexitcode=true
filter.lfs.process=git-lfs filter-process
filter.lfs.required=true
filter.lfs.clean=git-lfs clean -- %f
filter.lfs.smudge=git-lfs smudge -- %f
...skipping...
diff.astextplain.textconv=astextplain
filter.lfs.clean=git-lfs clean -- %f
filter.lfs.smudge=git-lfs smudge -- %f
filter.lfs.process=git-lfs filter-process
filter.lfs.required=true
http.sslbackend=openssl
http.sslcainfo=C:/Program Files/Git/mingw64/ssl/certs/ca-bundle.crt
```

\$: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.



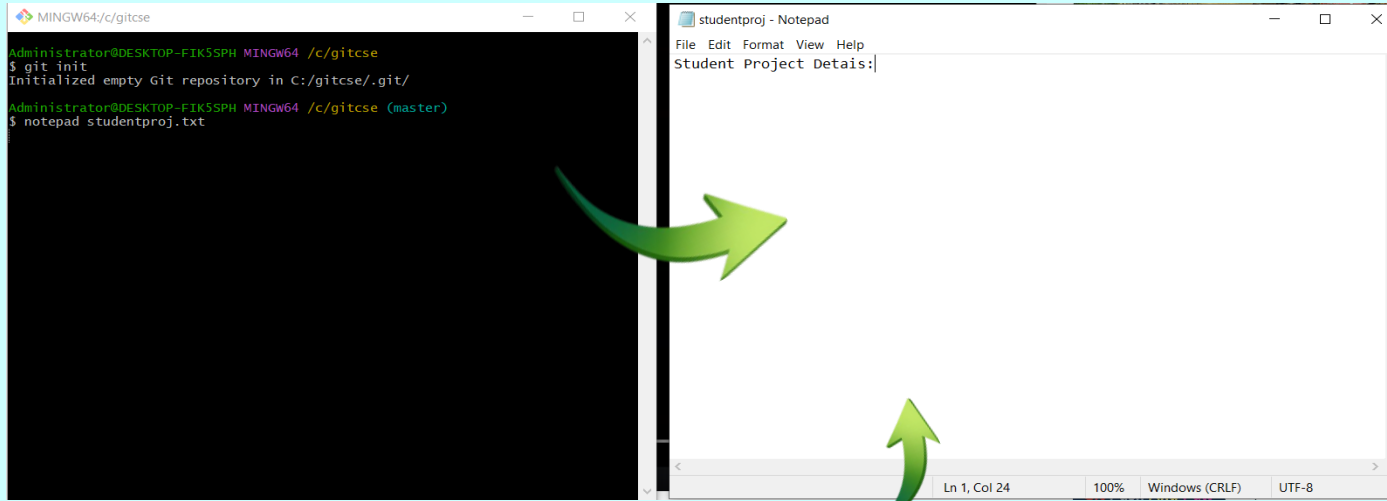
The screenshot shows a terminal window titled "MINGW64:/c/gitcse". The terminal output is as follows:

```
Administrator@DESKTOP-FIK5SPH MINGW64 /c/gitcse  
$ git init  
Initialized empty Git repository in C:/gitcse/.git/  
Administrator@DESKTOP-FIK5SPH MINGW64 /c/gitcse (master)  
$ |
```

A green arrow points from the text "# To check Branch." below to the "(master)" text in the terminal output.

To check Branch.

Git Application



To save and close.

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

No commits yet


Untracked files:
  (use "git add <file>..." to include in what will be committed)
  studentproj.txt

nothing added to commit but untracked files present (use "git add" to track)
Administrator@DESKTOP-FIK5SPH MINGW64 /c/gitcse (master)
$ |
```

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)
$ |
```

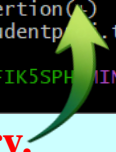


To check of status of files in local repository.

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 studentproject.txt

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

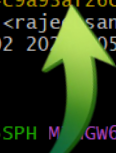


To commit files in local repository.

```
Administrator@DESKTOP-FIK5SPH MINGW64 /c/gitcse (master)
$ git log
commit 7bf285c413f94a63734c9a93af26c5415649d4ac (HEAD -> master)
Author: Rajeeb-s-bal-2021 <rajeeb.sankar.bal@abit.edu.in>
Date:   Sun Oct 29 20:18:02 2023 +0530

    First project Info


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



To log for commit ID. in local repository.

Git Application

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



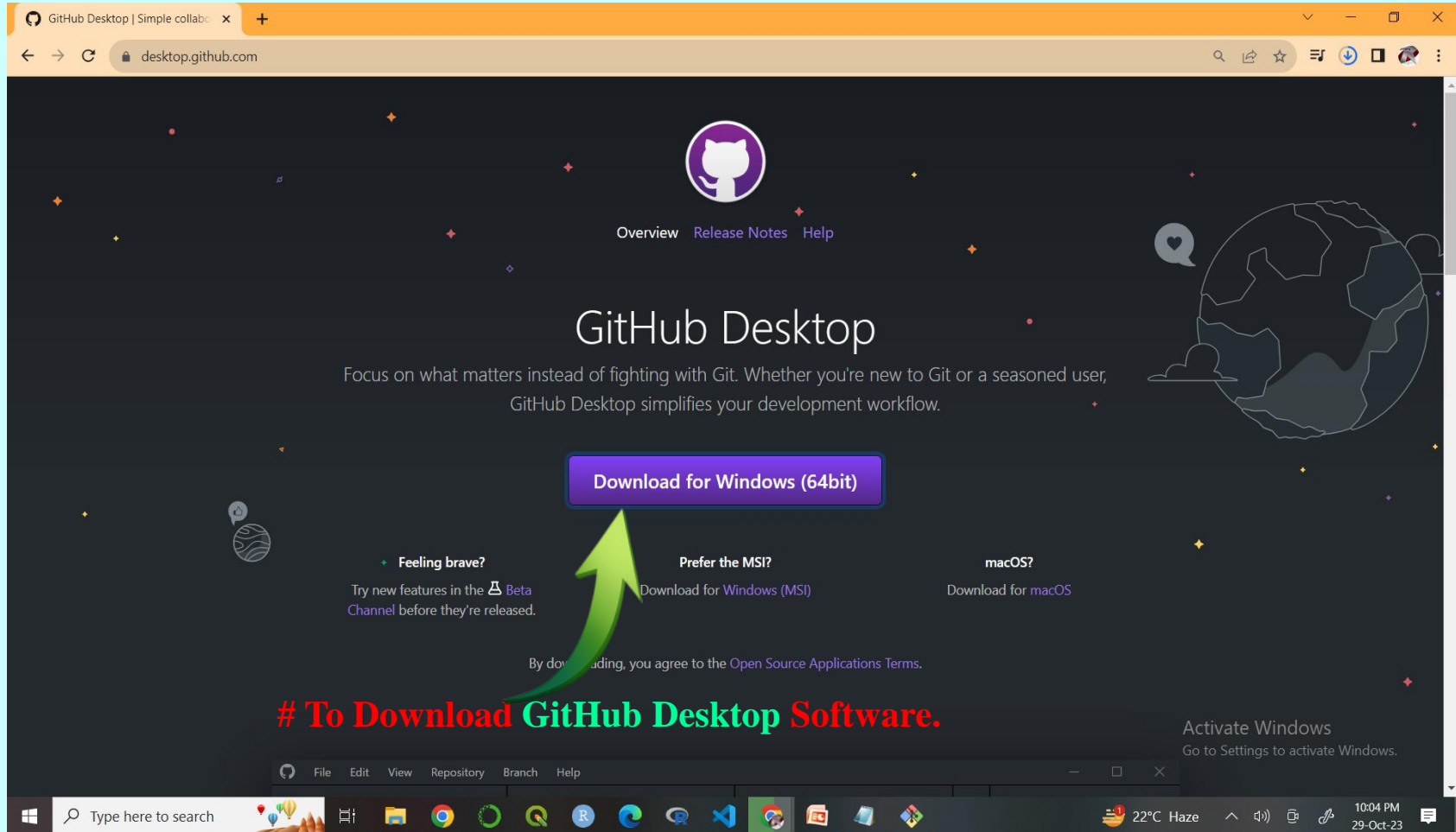
```
Administrator@DESKTOP-FIK5SPH MINGW64 /c/gitcse (master)
$ git remote add origin https://github.com/Rajeeb-s-bal-2021/csegit.git

Administrator@DESKTOP-FIK5SPH MINGW64 /c/gitcse (master)
$ git remote -v
origin https://github.com/Rajeeb-s-bal-2021/csegit.git (fetch)
origin https://github.com/Rajeeb-s-bal-2021/csegit.git (push)

Administrator@DESKTOP-FIK5SPH MINGW64 /c/gitcse (master)
$ git push -u origin master
Enumerating objects: 3, done.
Counting objects: 100% (3/3), done.
Writing objects: 100% (3/3), 258 bytes | 258.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
remote:
remote: Create a pull request for 'master' on GitHub by visiting:
remote: https://github.com/Rajeeb-s-bal-2021/csegit/pull/new/master
remote:
To https://github.com/Rajeeb-s-bal-2021/csegit.git
 * [new branch]      master -> master
branch 'master' set up to track 'origin/master'.

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

GitHub Desktop Application



The screenshot shows the GitHub Desktop website in a web browser. The browser's address bar shows 'desktop.github.com'. The website has a dark background with a starry space theme. At the top center is the GitHub logo (Octocat). Below it are links for 'Overview', 'Release Notes', and 'Help'. The main heading is 'GitHub Desktop', followed by the text: 'Focus on what matters instead of fighting with Git. Whether you're new to Git or a seasoned user, GitHub Desktop simplifies your development workflow.' On the right side, there is a large illustration of the Earth. In the center, there is a prominent blue button that says 'Download for Windows (64bit)'. A large green arrow points from the bottom left towards this button. Below the main heading, there are three sections: 'Feeling brave?' with a link to the 'Beta Channel', 'Prefer the MSI?' with a link to 'Download for Windows (MSI)', and 'macOS?' with a link to 'Download for macOS'. At the bottom, there is a line of text: 'By downloading, you agree to the Open Source Applications Terms.' In the bottom right corner, there is a 'Windows' activation watermark that says 'Activate Windows Go to Settings to activate Windows.' The browser's taskbar is visible at the very bottom, showing various application icons and the system clock.

GitHub Desktop | Simple collabor...

desktop.github.com

Overview Release Notes Help

GitHub Desktop

Focus on what matters instead of fighting with Git. Whether you're new to Git or a seasoned user, GitHub Desktop simplifies your development workflow.

[Download for Windows \(64bit\)](#)

[Feeling brave?](#)
Try new features in the [Beta Channel](#) before they're released.

[Prefer the MSI?](#)
[Download for Windows \(MSI\)](#)

[macOS?](#)
[Download for macOS](#)

By downloading, you agree to the [Open Source Applications Terms](#).

To Download GitHub Desktop Software.

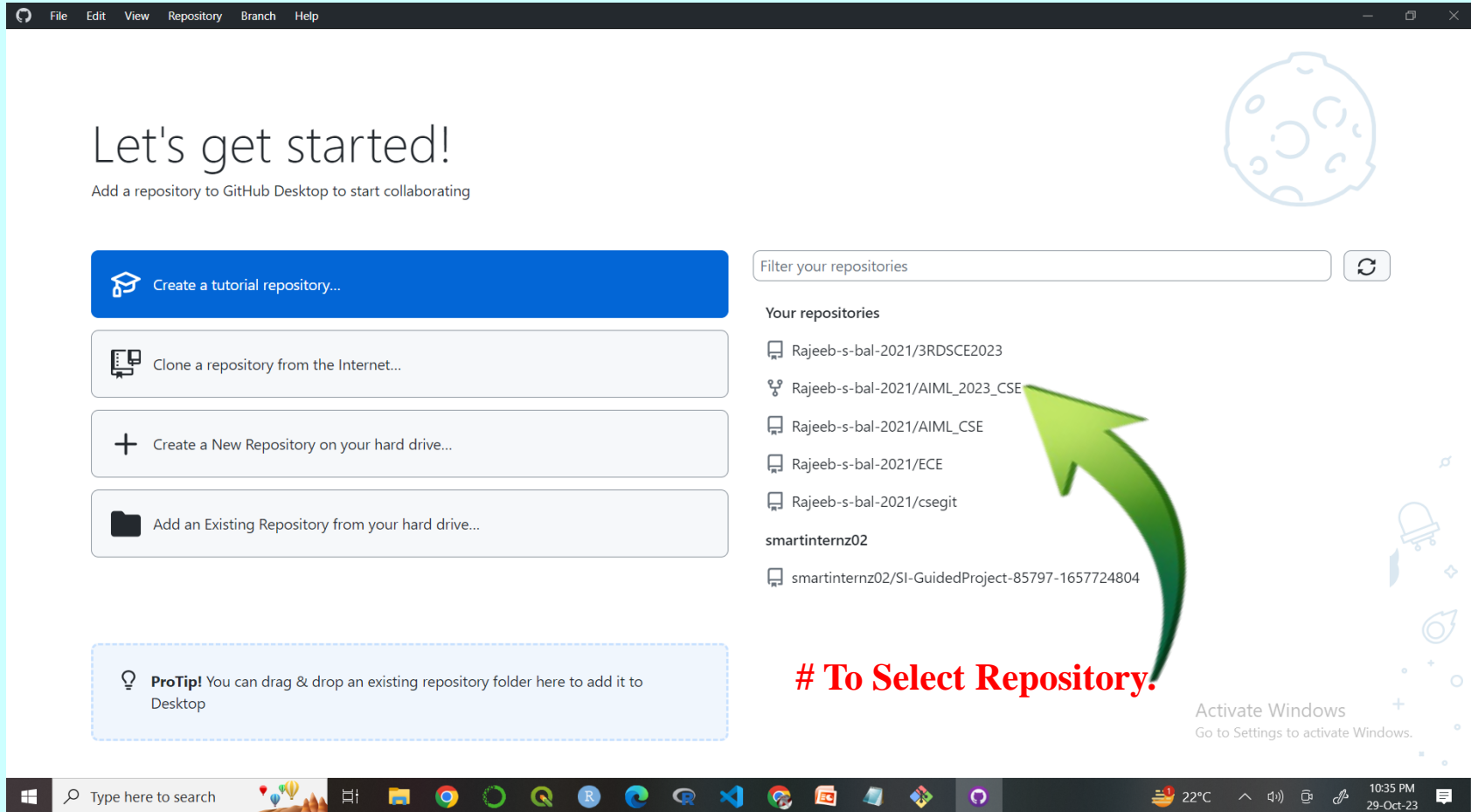
Activate Windows
Go to Settings to activate Windows.

File Edit View Repository Branch Help

Type here to search

22°C Haze 10:04 PM 29-Oct-23

GitHub Desktop Application



GitHub Desktop Application

