



Fatima Jinnah Women University

Opening Portals of Excellence Through Higher Education

CLOUD COMPUTING LAB 3

Working with Git History, Stashing, and Reverting Commits

Submitted to: Engr. Waqas Saleem

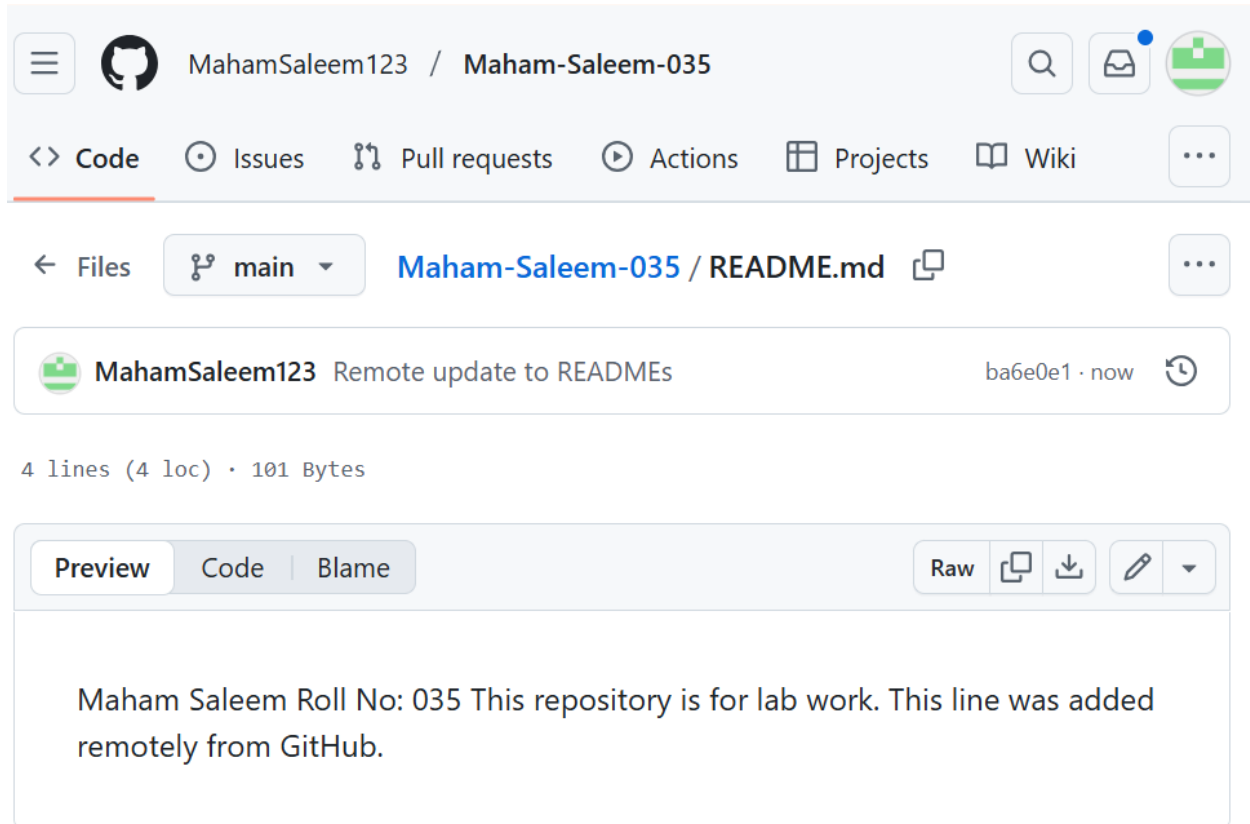
Engr. Muhammad Shahzad

Submitted by: Maham Saleem

Registration no.: 2023-BSE-035

Task 1 – Handling Local and Remote Commit Conflicts (Pull vs Pull --rebase)

remote_edit.png



local_commit.png

```
Hp Probook@DESKTOP-HB3S03U MINGW64 ~/Maham-Saleem-035 (main)
$ cd ~/Maham-Saleem-035

Hp Probook@DESKTOP-HB3S03U MINGW64 ~/Maham-Saleem-035 (main)
$ notepad README.md

Hp Probook@DESKTOP-HB3S03U MINGW64 ~/Maham-Saleem-035 (main)
$ git add README.md

Hp Probook@DESKTOP-HB3S03U MINGW64 ~/Maham-Saleem-035 (main)
$ git commit -m "Local update to README"
[main 11599b6] Local update to README
1 file changed, 1 insertion(+)
```

push_error.png

```
Hp Probook@DESKTOP-HB3S03U MINGW64 ~/Maham-Saleem-035 (main)
$ git push origin main
To https://github.com/MahamSaleem123/Maham-Saleem-035.git
 ! [rejected]        main -> main (fetch first)
error: failed to push some refs to 'https://github.com/MahamSaleem123/Maham-Saleem-035.git'
hint: Updates were rejected because the remote contains work that
you do not
hint: have locally. This is usually caused by another repository p
ushing to
hint: the same ref. If you want to integrate the remote changes, u
se
hint: 'git pull' before pushing again.
hint: See the 'Note about fast-forwards' in 'git push --help' for
details.
```

merge_commit.png

```
remote: Enumerating objects: 14, done.
remote: Counting objects: 100% (14/14), done.
remote: Compressing objects: 100% (12/12), done.
remote: Total 12 (delta 3), reused 0 (delta 0), pack-reused 0 (fro
m 0)
Unpacking objects: 100% (12/12), 209.47 KiB | 313.00 KiB/s, done.
From https://github.com/MahamSaleem123/Maham-Saleem-035
 * branch            main          -> FETCH_HEAD
    623f6f0..0108ca5  main          -> origin/main
Merge made by the 'ort' strategy.
 Lab-3/image.png | Bin 0 -> 34687 bytes
 1 file changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 Lab-3/image.png
```

push_after_merge.png

```
Hp Probook@DESKTOP-HB3S03U MINGW64 ~/Maham-Saleem-035 (main)
$ git push -u origin main
branch 'main' set up to track 'origin/main'.
Everything up-to-date
```

rebase_pull.png

```
Hp Probook@DESKTOP-HB3S03U MINGW64 ~/Maham-Saleem-035 (main)
$ git pull --rebase origin main
remote: Enumerating objects: 13, done.
remote: Counting objects: 100% (13/13), done.
remote: Compressing objects: 100% (10/10), done.
remote: Total 10 (delta 5), reused 0 (delta 0), pack-reused 0 (from 0)
Unpacking objects: 100% (10/10), 69.12 KiB | 164.00 KiB/s, done.
From https://github.com/MahamSaleem123/Maham-Saleem-035
* branch          main          -> FETCH_HEAD
   cc37746..0eab24b  main          -> origin/main
Updating cc37746..0eab24b
Fast-forward
 Lab-3/push_after_merge.png | Bin 0 -> 68502 bytes
 README.md                  | 1 +
 2 files changed, 1 insertion(+)
 create mode 100644 Lab-3/push_after_merge.png
```

push_after_rebase.png

```
Hp Probook@DESKTOP-HB3S03U MINGW64 ~/Maham-Saleem-035 (main)
$ git fetch origin
remote: Enumerating objects: 9, done.
remote: Counting objects: 100% (9/9), done.
remote: Compressing objects: 100% (7/7), done.
remote: Total 7 (delta 4), reused 0 (delta 0), pack-reused 0 (from 0)
Unpacking objects: 100% (7/7), 43.93 KiB | 123.00 KiB/s, done.
From https://github.com/MahamSaleem123/Maham-Saleem-035
   0eab24b..067e71e  main          -> origin/main

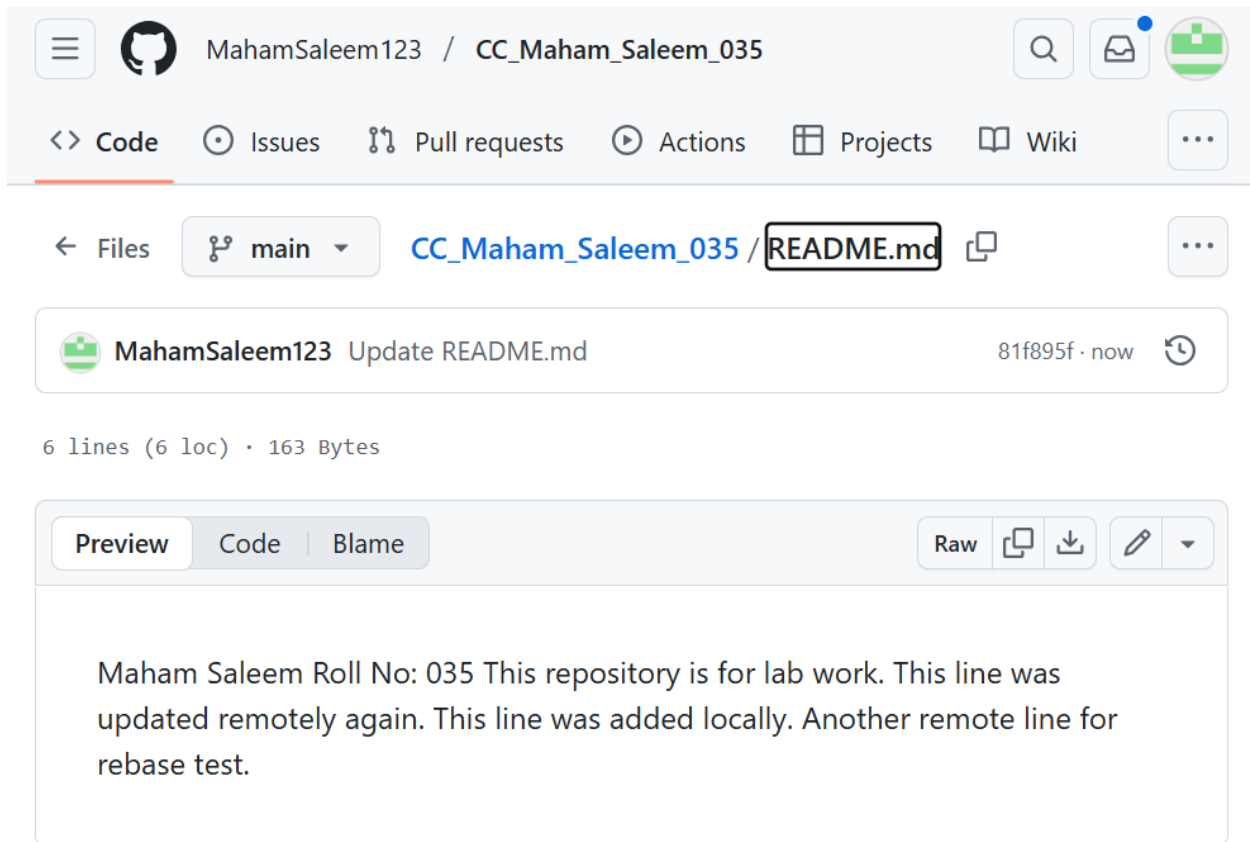
Hp Probook@DESKTOP-HB3S03U MINGW64 ~/Maham-Saleem-035 (main)
$ git rebase origin/main
Successfully rebased and updated refs/heads/main.

Hp Probook@DESKTOP-HB3S03U MINGW64 ~/Maham-Saleem-035 (main)
$ git push origin main
Everything up-to-date

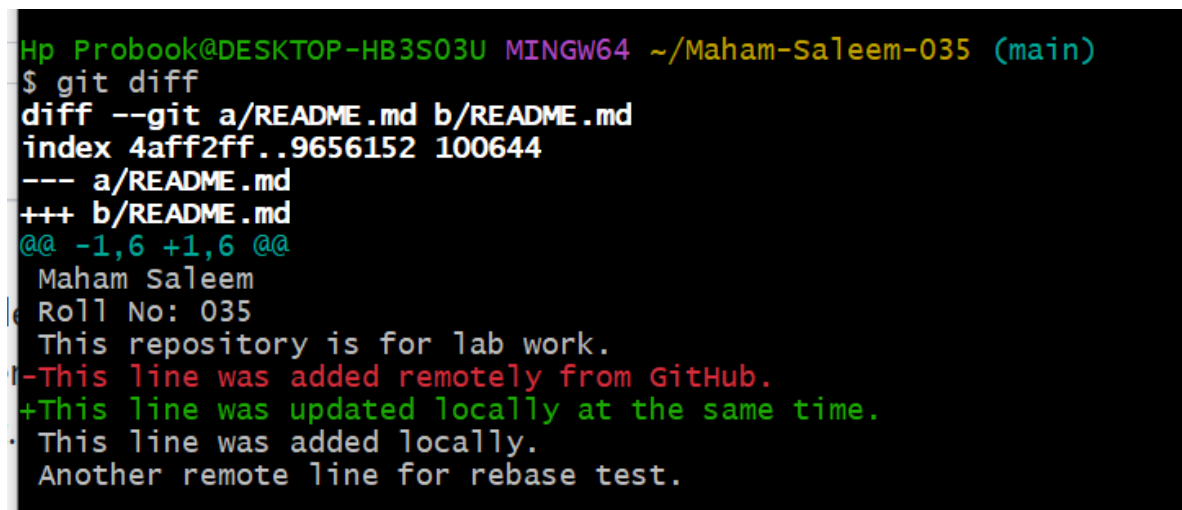
Hp Probook@DESKTOP-HB3S03U MINGW64 ~/Maham-Saleem-035 (main)
$ git push -u origin main
branch 'main' set up to track 'origin/main'.
Everything up-to-date
```

Task 2 – Creating and Resolving Merge Conflicts Manually

remote_conflict_edit.png



local_conflict_edit.png



local_conflict_commit.png

```
Hp Probook@DESKTOP-HB3S03U MINGW64 ~/Maham-Saleem-035 (main)
$ git commit -m "Local conflicting change"
[main de101ef] Local conflicting change
1 file changed, 1 insertion(+), 1 deletion(-)
```

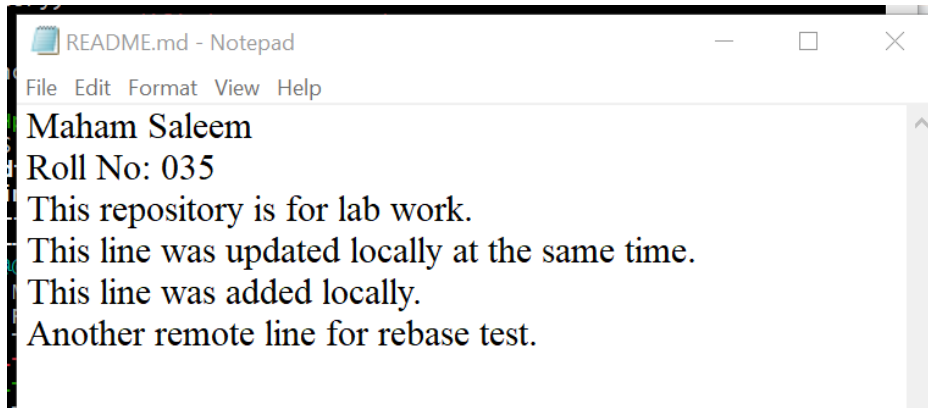
conflict_push_error.png

```
Hp Probook@DESKTOP-HB3S03U MINGW64 ~/Maham-Saleem-035 (main)
$ git push -u origin main
remote: Repository not found.
fatal: repository 'https://github.com/MahamSaleem123/CC_MahamSaleem_035.git/' not found
```

conflict_message.png

```
Hp Probook@DESKTOP-HB3S03U MINGW64 ~/Maham-Saleem-035 (main)
$ git pull --rebase origin main
remote: Repository not found.
fatal: repository 'https://github.com/MahamSaleem123/CC_MahamSaleem_035.git/' not found
```

resolved_readme.png



rebase_continue.png

```
Hp Probook@DESKTOP-HB3S03U MINGW64 ~/Maham-Saleem-035 (main)
$ git status
On branch main
Your branch is ahead of 'origin/main' by 1 commit.
  (use "git push" to publish your local commits)

nothing to commit, working tree clean

Hp Probook@DESKTOP-HB3S03U MINGW64 ~/Maham-Saleem-035 (main)
$ git log --oneline -5
de101ef (HEAD -> main) Local conflicting change
067e71e (origin/main, origin/HEAD) Rename image.png to rebase_pull
.png
32375b2 rebase_pull.png
0eab24b Update README.md
5bd5d2a Rename image.png to push_after_merge.png

Hp Probook@DESKTOP-HB3S03U MINGW64 ~/Maham-Saleem-035 (main)
$ git add README.md

Hp Probook@DESKTOP-HB3S03U MINGW64 ~/Maham-Saleem-035 (main)
$ git rebase --continue
fatal: no rebase in progress
```

```
Local conflicting change

# Conflicts:
#     README.md

# Please enter the commit message for your changes. Lines starting
# with '#' will be ignored, and an empty message aborts the commit.
#
# interactive rebase in progress; onto 29be07d
# Last command done (1 command done):
#   pick de101ef # Local conflicting change
# No commands remaining.
# You are currently rebasing branch 'main' on '29be07d'.
#
# Changes to be committed:
#   modified:   README.md
#
```


push_after_resolve.png

```
[detached HEAD 921dadb] Local conflicting change
1 file changed, 1 insertion(+)
Successfully rebased and updated refs/heads/main.

Hp Probook@DESKTOP-HB3S03U MINGW64 ~/Maham-Saleem-035 (main)
$ git status
On branch main
Your branch is ahead of 'origin/main' by 1 commit.
  (use "git push" to publish your local commits)

nothing to commit, working tree clean

Hp Probook@DESKTOP-HB3S03U MINGW64 ~/Maham-Saleem-035 (main)
$ git push -u origin main --force
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Delta compression using up to 8 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (3/3), 425 bytes | 212.00 KiB/s, done.
Total 3 (delta 1), reused 0 (delta 0), pack-reused 0 (from 0)
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
To https://github.com/MahamSaleem123/CC_Maham_Saleem_035.git
   29be07d..921dadb  main -> main
branch 'main' set up to track 'origin/main'.
```

Task 3 – Managing Ignored Files with .gitignore and Removing Tracked Files

push_textfiles.png

```
Hp Probook@DESKTOP-HB3S03U MINGW64 ~/Maham-Saleem-035 (main)
$ cd ~/Maham-Saleem-035

Hp Probook@DESKTOP-HB3S03U MINGW64 ~/Maham-Saleem-035 (main)
$ mkdir textfiles

Hp Probook@DESKTOP-HB3S03U MINGW64 ~/Maham-Saleem-035 (main)
$ echo "File A content" > textfiles/a.txt

Hp Probook@DESKTOP-HB3S03U MINGW64 ~/Maham-Saleem-035 (main)
$ echo "File B content" > textfiles/b.txt

Hp Probook@DESKTOP-HB3S03U MINGW64 ~/Maham-Saleem-035 (main)
$ echo "File C content" > textfiles/c.txt
```



```

Hp Probook@DESKTOP-HB3S03U MINGW64 ~/Maham-Saleem-035 (main)
$ git add .
warning: in the working copy of 'textfiles/a.txt', LF will be replaced by CRLF t
he next time Git touches it
warning: in the working copy of 'textfiles/b.txt', LF will be replaced by CRLF t
he next time Git touches it
warning: in the working copy of 'textfiles/c.txt', LF will be replaced by CRLF t
he next time Git touches it

Hp Probook@DESKTOP-HB3S03U MINGW64 ~/Maham-Saleem-035 (main)
$ git commit -m "Added textfiles directory with three files"
[main d5eb2ed] Added textfiles directory with three files
 3 files changed, 3 insertions(+)
 create mode 100644 textfiles/a.txt
 create mode 100644 textfiles/b.txt
 create mode 100644 textfiles/c.txt

```

```

Hp Probook@DESKTOP-HB3S03U MINGW64 ~/Maham-Saleem-035 (main)
$ git pull origin main --rebase
remote: Enumerating objects: 9, done.
remote: Counting objects: 100% (9/9), done.
remote: Compressing objects: 100% (7/7), done.
remote: Total 7 (delta 4), reused 0 (delta 0), pack-reused 0 (from 0)
Unpacking objects: 100% (7/7), 57.48 KiB | 214.00 KiB/s, done.
From https://github.com/MahamSaleem123/CC_Maham_Saleem_035
 * branch          main          -> FETCH_HEAD
 921dadb..b807990  main          -> origin/main
Successfully rebased and updated refs/heads/main.

Hp Probook@DESKTOP-HB3S03U MINGW64 ~/Maham-Saleem-035 (main)
$ git push origin main
Enumerating objects: 7, done.
Counting objects: 100% (7/7), done.
Delta compression using up to 8 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (6/6), 465 bytes | 66.00 KiB/s, done.
Total 6 (delta 1), reused 0 (delta 0), pack-reused 0 (from 0)
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
To https://github.com/MahamSaleem123/CC_Maham_Saleem_035.git
 b807990..3712de2  main -> main

```

gitignore_push.png

```

Hp Probook@DESKTOP-HB3S03U MINGW64 ~/Maham-Saleem-035 (main)
$ git push origin main
Enumerating objects: 4, done.
Counting objects: 100% (4/4), done.
Delta compression using up to 8 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 323 bytes | 161.00 KiB/s, done.
Total 3 (delta 1), reused 0 (delta 0), pack-reused 0 (from 0)
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
To https://github.com/MahamSaleem123/CC_Maham_Saleem_035.git
 da5e742..6eda6de  main -> main

```

repo_still_has_textfiles.png

← Files main CC_Maham_Saleem_035 / .gitignore

MahamSaleem123 Added .gitignore to ignore tex... 6eda6de · 13 minutes ago

1 lines (1 loc) · 12 Bytes

Code Blame Raw

```
1 textfiles/*
```

```
Hp Probook@DESKTOP-HB3S03U MINGW64 ~/Maham-Saleem-035 (main)
$ git rm -r --cached textfiles
rm 'textfiles/a.txt'
rm 'textfiles/b.txt'
rm 'textfiles/c.txt'

Hp Probook@DESKTOP-HB3S03U MINGW64 ~/Maham-Saleem-035 (main)
$ git add .

Hp Probook@DESKTOP-HB3S03U MINGW64 ~/Maham-Saleem-035 (main)
$ git commit -m "Removed tracked textfiles directory"
[main 2561bab] Removed tracked textfiles directory
3 files changed, 3 deletions(-)
delete mode 100644 textfiles/a.txt
delete mode 100644 textfiles/b.txt
delete mode 100644 textfiles/c.txt
```

```
Hp Probook@DESKTOP-HB3S03U MINGW64 ~/Maham-Saleem-035 (main)
$ git push origin main
Enumerating objects: 3, done.
Counting objects: 100% (3/3), done.
Delta compression using up to 8 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (2/2), 256 bytes | 256.00 KiB/s, done.
Total 2 (delta 1), reused 0 (delta 0), pack-reused 0 (from 0)
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
To https://github.com/MahamSaleem123/CC_Maham_Saleem_035.git
0fc9ab0..222a828 main -> main
```

repo_textfiles_removed.png

```
Hp Probook@DESKTOP-HB3S03U MINGW64 ~/Maham-Saleem-035 (main)
$ cd ~/Maham-Saleem-035

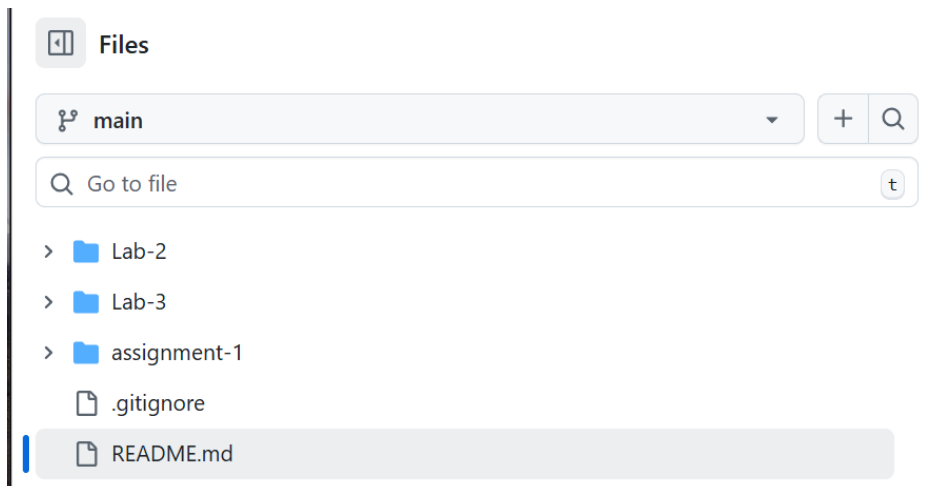
Hp Probook@DESKTOP-HB3S03U MINGW64 ~/Maham-Saleem-035 (main)
$ cat .gitignore
textfiles/*

Hp Probook@DESKTOP-HB3S03U MINGW64 ~/Maham-Saleem-035 (main)
$ git add .gitignore

Hp Probook@DESKTOP-HB3S03U MINGW64 ~/Maham-Saleem-035 (main)
$ git commit -m "Added .gitignore to ignore textfiles directory"
On branch main
Your branch is up to date with 'origin/main'.

nothing to commit, working tree clean

Hp Probook@DESKTOP-HB3S03U MINGW64 ~/Maham-Saleem-035 (main)
$ git push origin main
Everything up-to-date
```



Task 4 – Create Temporary Changes and Use git stash

modified_readme.png

```
Hp Probook@DESKTOP-HB3S03U MINGW64 ~/Maham-Saleem-035/Lab-3 (main)
$ git checkout -b feature-branch
Switched to a new branch 'feature-branch'
```

```
Hp Probook@DESKTOP-HB3S03U MINGW64 ~/Maham-Saleem-035/Lab-3 (feature-branch)
$ git add README.md
warning: in the working copy of 'README.md', LF will be replaced by CRLF the next time Git touches it

Hp Probook@DESKTOP-HB3S03U MINGW64 ~/Maham-Saleem-035/Lab-3 (feature-branch)
$ git commit -m "Changes the README.md file"
[feature-branch 8c72a95] Changes the README.md file
1 file changed, 1 insertion(+)
create mode 100644 README.md
```

checkout_error.png

```
Hp Probook@DESKTOP-HB3S03U MINGW64 ~/Maham-Saleem-035/Lab-3 (feature-branch)
$ notepad README.md

Hp Probook@DESKTOP-HB3S03U MINGW64 ~/Maham-Saleem-035/Lab-3 (feature-branch)
$ git status
On branch feature-branch
Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory)
       modified:   README.md

no changes added to commit (use "git add" and/or "git commit -a")

Hp Probook@DESKTOP-HB3S03U MINGW64 ~/Maham-Saleem-035/Lab-3 (feature-branch)
$ git checkout main
error: Your local changes to the following files would be overwritten by checkout:
      README.md
Please commit your changes or stash them before you switch branches.
Aborting
```

stash_command.png

```
Hp Probook@DESKTOP-HB3S03U MINGW64 ~/Maham-Saleem-035/Lab-3 (feature-branch)
$ git stash
Saved working directory and index state WIP on feature-branch: 8c72a95 Changes the README.md file
```

branch_switched.png

```
Hp Probook@DESKTOP-HB3S03U MINGW64 ~/Maham-Saleem-035/Lab-3 (feature-b
branch)
$ git checkout main
Switched to branch 'main'
Your branch is up to date with 'origin/main'.
```

back_to_feature.png

```
Hp Probook@DESKTOP-HB3S03U MINGW64 ~/Maham-Saleem-035/Lab-3 (main)
$ git checkout feature-branch
Switched to branch 'feature-branch'
```

status_clean.png

```
Hp Probook@DESKTOP-HB3S03U MINGW64 ~/Maham-Saleem-035/Lab-3 (feature-b
branch)
$ git status
On branch feature-branch
nothing to commit, working tree clean
```

stash_pop.png

```
Hp Probook@DESKTOP-HB3S03U MINGW64 ~/Maham-Saleem-035/Lab-3 (feature-b
branch)
$ git stash pop
On branch feature-branch
Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory
)
        modified:   README.md

no changes added to commit (use "git add" and/or "git commit -a")
Dropped refs/stash@{0} (c62102d586f51077461487821190d3582e213597)
```

Task 5 – Checkout a Specific Commit Using git log

log_before_checkout.png

```
Hp Probook@DESKTOP-HB3S03U MINGW64 ~/Maham-Saleem-035/Lab-3 (feature-b
ranch)
$ git log --oneline
8c72a95 (HEAD -> feature-branch) Changes the README.md file
ec86f66 (origin/main, main) Initial commit for new repo
```

detached_head.png

```
Hp Probook@DESKTOP-HB3S03U MINGW64 ~/Maham-Saleem-035/Lab-3 (feature-b
ranch)
$ git checkout ec86f66
Note: switching to 'ec86f66'.

You are in 'detached HEAD' state. You can look around, make experiment
al
changes and commit them, and you can discard any commits you make in t
his
state without impacting any branches by switching back to a branch.

If you want to create a new branch to retain commits you create, you m
ay
do so (now or later) by using -c with the switch command. Example:

    git switch -c <new-branch-name>

Or undo this operation with:

    git switch -

Turn off this advice by setting config variable advice.detachedHead to
false

HEAD is now at ec86f66 Initial commit for new repo
```

back_to_main.png

```
Hp Probook@DESKTOP-HB3S03U MINGW64 ~/Maham-Saleem-035/Lab-3 ((ec86f66.
..))
$ git checkout main
Switched to branch 'main'
Your branch is up to date with 'origin/main'.
```

Task 6 – Resetting Commits (Soft vs Hard Reset) (With Verification Steps)

first_commit.png

```
Hp Probook@DESKTOP-HB3S03U MINGW64 ~/Maham-Saleem-035/Lab-3 (main)
$ notepad README.md

Hp Probook@DESKTOP-HB3S03U MINGW64 ~/Maham-Saleem-035/Lab-3 (main)
$ git add .

Hp Probook@DESKTOP-HB3S03U MINGW64 ~/Maham-Saleem-035/Lab-3 (main)
$ git commit -m "Added test line"
[main a5f33cf] Added test line
1 file changed, 1 deletion(-)
```

second_commit.png

```
Hp Probook@DESKTOP-HB3S03U MINGW64 ~/Maham-Saleem-035/Lab-3 (main)
$ notepad README.md

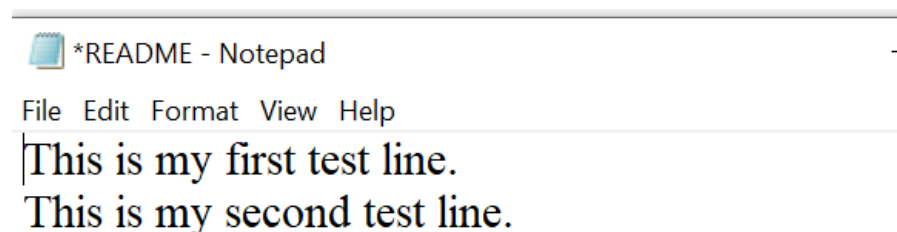
Hp Probook@DESKTOP-HB3S03U MINGW64 ~/Maham-Saleem-035/Lab-3 (main)
$ git add .

Hp Probook@DESKTOP-HB3S03U MINGW64 ~/Maham-Saleem-035/Lab-3 (main)
$ git commit -m "Second test commit"
[main 3fb07ed] Second test commit
1 file changed, 2 insertions(+)
```

log_before_reset.png

```
Hp Probook@DESKTOP-HB3S03U MINGW64 ~/Maham-Saleem-035/Lab-3 (main)
$ git log --oneline
3fb07ed (HEAD -> main) Second test commit
a5f33cf Added test line
38c2c87 Add README.md file to main branch
ec86f66 Initial commit for new repo
```

file_before_reset.png



soft_reset.png

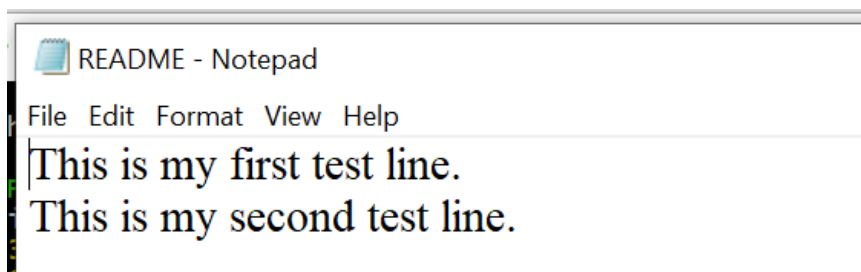
```
Hp Probook@DESKTOP-HB3S03U MINGW64 ~/Maham-Saleem-035/Lab-3 (main)
$ git reset --soft HEAD~1
```

log_after_soft_reset.png

```
Hp Probook@DESKTOP-HB3S03U MINGW64 ~/Maham-Saleem-035/Lab-3 (main)
$ git reset --soft HEAD~1

Hp Probook@DESKTOP-HB3S03U MINGW64 ~/Maham-Saleem-035/Lab-3 (main)
$ git log --oneline
a5f33cf (HEAD -> main) Added test line
38c2c87 Add README.md file to main branch
ec86f66 Initial commit for new repo
```

file_after_soft_reset.png



```
Hp Probook@DESKTOP-HB3S03U MINGW64 ~/Maham-Saleem-035/Lab-3 (main)
$ git status
On branch main
Your branch and 'origin/main' have diverged,
and have 1 and 26 different commits each, respectively.
(use "git pull" if you want to integrate the remote branch with yours)

Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
        modified:   README.md
```

file_after_hard_reset.png

```
Hp Probook@DESKTOP-HB3S03U MINGW64 ~/Maham-Saleem-035/Lab-3 (main)
$ git commit -m "Second Test commit"
[main 5a850d4] Second Test commit
1 file changed, 2 insertions(+)
```

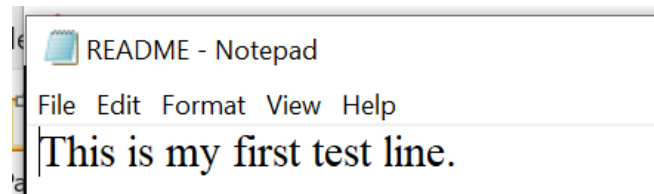
hard_reset.png

```
Hp Probook@DESKTOP-HB3S03U MINGW64 ~/Maham-Saleem-035/Lab-3 (main)
$ git reset --hard HEAD~1
HEAD is now at a5f33cf Added test line
```

log_after_hard_reset.png

```
Hp Probook@DESKTOP-HB3S03U MINGW64 ~/Maham-Saleem-035/Lab-3 (main)
$ git log --oneline
a5f33cf (HEAD -> main) Added test line
38c2c87 Add README.md file to main branch
ec86f66 Initial commit for new repo
```

file_after_hard_reset.png



```
Hp Probook@DESKTOP-HB3S03U MINGW64 ~/Maham-Saleem-035/Lab-3 (main)
$ git status
On branch main
Your branch and 'origin/main' have diverged,
and have 1 and 26 different commits each, respectively.
(use "git pull" if you want to integrate the remote branch with yours)

nothing to commit, working tree clean
```

Task 7 – Amending the Last Commit

first_amend_commit.png

```
Hp Probook@DESKTOP-HB3S03U MINGW64 ~/Maham-Saleem-035/Lab-3 (main)
$ notepad README.md

Hp Probook@DESKTOP-HB3S03U MINGW64 ~/Maham-Saleem-035/Lab-3 (main)
$ git add .

Hp Probook@DESKTOP-HB3S03U MINGW64 ~/Maham-Saleem-035/Lab-3 (main)
$ git commit -m "Fix log message"
[main c56b690] Fix log message
1 file changed, 1 insertion(+)
```

```
Fix log message
```

```
# Please enter the commit message for your changes. Lines starting  
# with '#' will be ignored, and an empty message aborts the commit.  
#  
# Date:      Thu Oct 23 13:53:54 2025 +0500  
#  
# On branch main  
# Your branch and 'origin/main' have diverged,  
# and have 2 and 26 different commits each, respectively.  
#  
# Changes to be committed:  
#   modified:   README.md  
#  
~  
~  
~  
~  
~  
~  
~  
~  
  
.git/COMMIT_EDITMSG [unix] (13:59 23/10/2025) 1,1 A11  
~/Maham-Saleem-035/Lab-3/.git/COMMIT_EDITMSG" [unix] 14L, 377B
```

```
commit temp file.png
```

```

Hp Probook@DESKTOP-HB3S03U MINGW64 ~/Maham-Saleem-035/Lab-3 (main)
$ echo "temporary text" >> temp.txt

Hp Probook@DESKTOP-HB3S03U MINGW64 ~/Maham-Saleem-035/Lab-3 (main)
$ git add .
warning: in the working copy of 'temp.txt', LF will be replaced by CRLF the next
time Git touches it

Hp Probook@DESKTOP-HB3S03U MINGW64 ~/Maham-Saleem-035/Lab-3 (main)
$ git commit -m "Added temporary text file"
[main 635aecc] Added temporary text file
1 file changed, 1 insertion(+)
create mode 100644 temp.txt

Hp Probook@DESKTOP-HB3S03U MINGW64 ~/Maham-Saleem-035/Lab-3 (main|REBASE 2/3)
$ git push origin main
Everything up-to-date

```

revert_commit.png

```

Hp Probbook@DESKTOP-HB3S03U MINGW64 ~/Maham-Saleem-035/Lab-3 (main|REBASE 2/3)
$ git log --oneline
227228c (HEAD) Added temporary text file
b7288b7 Added test line
c9fc7ca Resolve merge conflict in README.md
38c2c87 Add README.md file to main branch
b75f2fb Rename image.png to back_to_main.png
7c7b846 back_to_main.png
61184ba Rename image.png to detached_head.png
d3602f7 detached_head.png
5a72b08 Rename image.png to log_before_checkout.png
056bb03 log_before_checkout.png
5f704d0 Rename image.png to branch_switched.png
fdb259b branch_switched.png
a46de77 Rename image.png to back_to_feature.png
3c1cb82 back_to_feature.png
18a7632 Rename image.png to status_clean.png
c3dbb74 status_clean.png
65b38f0 Rename image.png to stash_pop.png
04d4436 stash_pop.png
db76215 Rename image.png to stash_command.png
6b11ead stash_command.png
70648de Rename image.png to checkout_error.png

```

```
e16dbe4 modified_readme.png
Revert "Added temporary text file"

This reverts commit 227228c43d78011b479b2a812c340a7e9db1736e.

# Please enter the commit message for your changes. Lines starting
# with '#' will be ignored, and an empty message aborts the commit.
#
# interactive rebase in progress; onto c9fc7ca
# Last commands done (2 commands done):
#   pick a5f33cf # Added test line
#   pick 3920f30 # Fix log message
# Next command to do (1 remaining command):
#   pick 635aecc # Added temporary text file
# You are currently rebasing branch 'main' on 'c9fc7ca'.
#
# Changes to be committed:
#       modified:   README.md
#       deleted:    temp.txt
#
~
~
~
~
~
```

.git/COMMIT_EDITMSG [unix] (20:17 23/10/2025)

1.1 A17

revert push.png

```
Hp Probook@DESKTOP-HB3S03U MINGW64 ~/Maham-Saleem-035/Lab-3 (main|REBASE 2/3)
$ git push origin main
Everything up-to-date
```

Task 9 – Force Push (With Caution)

new_branch.png

```
Hp Probook@DESKTOP-HB3S03U MINGW64 ~/Maham-Saleem-035/Lab-3 (main|REBASE 2/3)
$ git checkout -b test-force
Switched to a new branch 'test-force'
```

force_commit.png

```
Hp Probook@DESKTOP-HB3S03U MINGW64 ~/Maham-Saleem-035/Lab-3 (main|REBASE 2/3)
$ notepad README.md

Hp Probook@DESKTOP-HB3S03U MINGW64 ~/Maham-Saleem-035/Lab-3 (main|REBASE 2/3)
$ git add .

Hp Probook@DESKTOP-HB3S03U MINGW64 ~/Maham-Saleem-035/Lab-3 (main|REBASE 2/3)
$ git commit -m "Add test force push line"
[test-force 7ac49ce] Add test force push line
1 file changed, 1 insertion(+), 4 deletions(-)
```

push_force_branch.png

```
Hp Probook@DESKTOP-HB3S03U MINGW64 ~/Maham-Saleem-035/Lab-3 (main|REBASE 2/3)
$ git push origin test-force
Enumerating objects: 81, done.
Counting objects: 100% (81/81), done.
Delta compression using up to 8 threads
Compressing objects: 100% (76/76), done.
Writing objects: 100% (78/78), 555.53 KiB | 6.86 MiB/s, done.
Total 78 (delta 33), reused 0 (delta 0), pack-reused 0 (from 0)
remote: Resolving deltas: 100% (33/33), completed with 1 local object.
remote:
remote: Create a pull request for 'test-force' on GitHub by visiting:
remote:   https://github.com/MahamSaleem123/Lab-3/pull/new/test-force
remote:
To https://github.com/MahamSaleem123/Lab-3.git
 * [new branch]      test-force -> test-force
```

hard_reset_force.png

```
Hp Probook@DESKTOP-HB3S03U MINGW64 ~/Maham-Saleem-035/Lab-3 (main|REBASE 2/3)
$ git reset --hard HEAD~1
HEAD is now at 4962f3f Revert "Added temporary text file"
```

normal_push.png

```
Hp Probook@DESKTOP-HB3S03U MINGW64 ~/Maham-Saleem-035/Lab-3 (main|REBASE 2/3)
$ git push origin test-force
To https://github.com/MahamSaleem123/Lab-3.git
! [rejected]        test-force -> test-force (non-fast-forward)
error: failed to push some refs to 'https://github.com/MahamSaleem123/Lab-3.git'
hint: Updates were rejected because the tip of your current branch is behind
hint: its remote counterpart. If you want to integrate the remote changes,
hint: use 'git pull' before pushing again.
hint: See the 'Note about fast-forwards' in 'git push --help' for details.
```

force_push.png

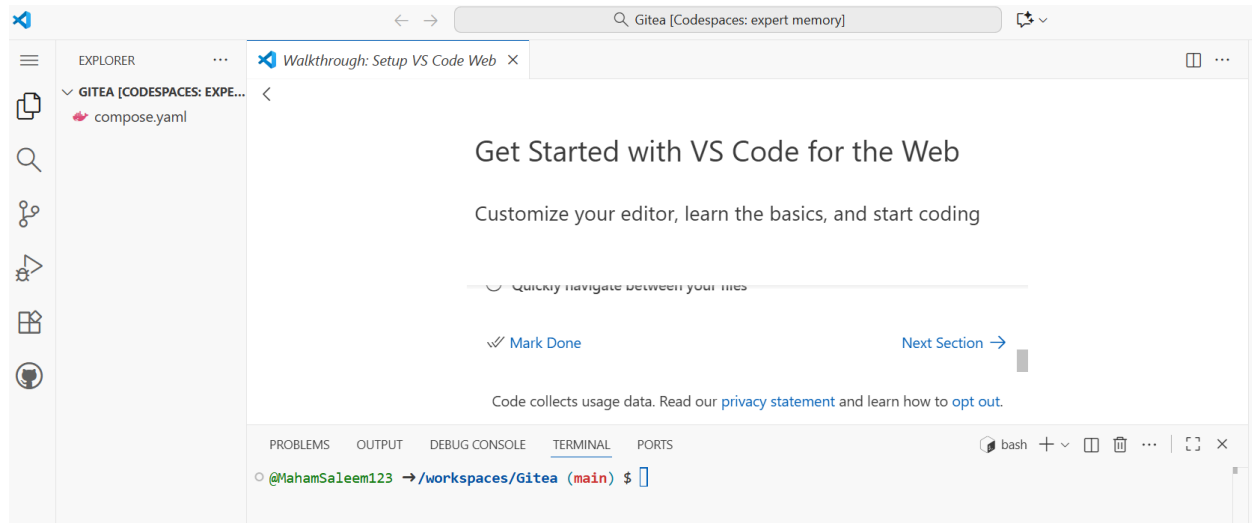
```
Hp Probook@DESKTOP-HB3S03U MINGW64 ~/Maham-Saleem-035/Lab-3 (main|REBASE 2/3)
$ git push origin test-force --force
Total 0 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To https://github.com/MahamSaleem123/Lab-3.git
+ 7ac49ce...4962f3f test-force -> test-force (forced update)
```

Task 10 – Running Gitea in GitHub Codespaces via Docker Compose

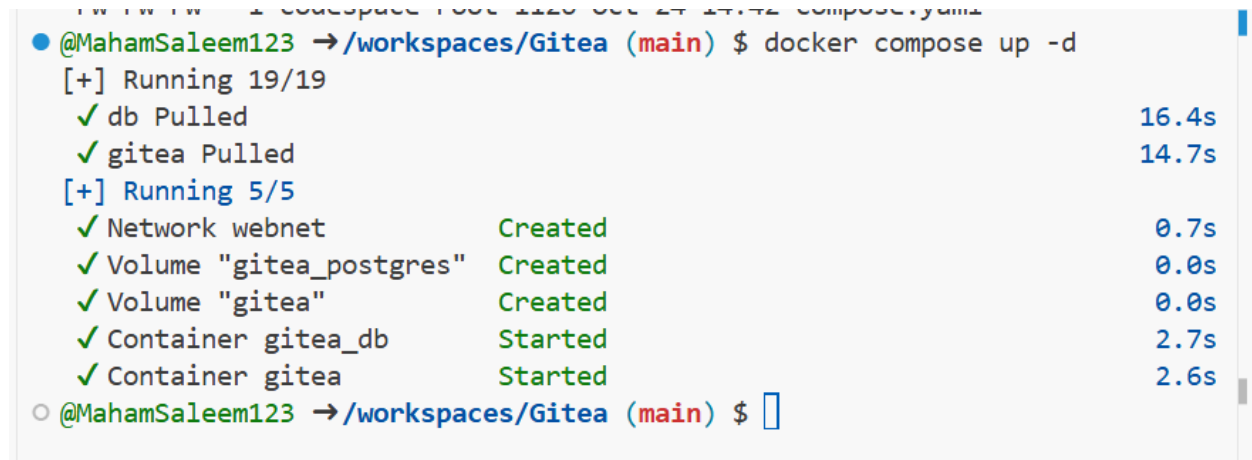
forked_gitea.png

The screenshot shows the Gitea web interface for a repository named 'Gitea' owned by 'MahamSaleem123'. The repository is public and was forked from 'WaqasSaleem97/Gitea'. The main branch is 'main', and there is 1 branch and 0 tags. The repository is up to date with the upstream 'WaqasSaleem97/Gitea:main'. The latest commit is by 'WaqasSaleem97' titled 'giving the names to databases', dated 3 weeks ago, with 2 commits. A file named 'compose.yaml' is listed with the same commit message and date. A 'README' file is also visible.

codespace_loading.png



docker_up.png



Port	Forwarded Address	Running Process	Visibility	Origin
3000	https://expert-memory-r45...	/usr/bin/docker-proxy -proto tcp -host-ip 0.0.0.0 -host-p...	Public	Auto Forwarded
Add Port				

gitea_install_page.png

PORT NUMBER THE GITEA WEB SERVER WILL LISTEN ON.

Gitea Base URL *
Base address for HTTP(S) clone URLs and email notifications.

Log Path *
Log files will be written to this directory.

☐ Enable Update Checker
Checks for new version releases periodically by connecting to gitea.io.

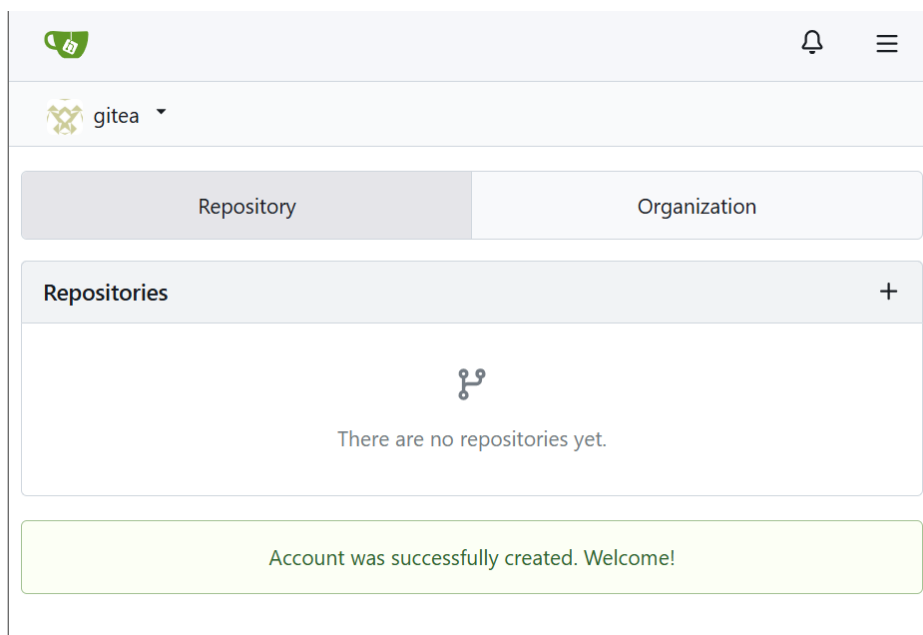
Optional Settings

- Email Settings
- Server and Third-Party Service Settings
- Administrator Account Settings

These configuration options will be written into:
`/data/gitea/conf/app.ini`

[Install Gitea](#)

gitea_dashboard.png



New Repository

A repository contains all project files, including revision history. Already hosting one elsewhere? [Migrate repository](#).

Owner *



gitea

Some organizations may not show up in the dropdown due to a maximum repository count limit.

Repository Name *

CC_MahamSaleem_035

Good repository names use short, memorable and unique keywords. A repository named ".profile" or ".profile-private" could be used to add a README.md for the user/organization profile.

Visibility

☐ Make repository private

Only the owner or the organization members if they have rights, will be able to see it.

Description

Gitea assignment by Maham Saleem (2023-BSE-035)

gitea_new_repo.png

The screenshot shows the Gitea web interface for a repository named 'gitea / CC_MahamSaleem_035'. The top navigation bar includes links for Issues, Pull Requests, Milestones, and Explore. The repository page features a 'Quick Guide' section with instructions on how to clone the repository using HTTPS or SSH. The SSH URL is 'https://expert-memory-r45g6jrwpp4vhwqp9-3000.app.github.dev/gitea/CC_MahamSaleem_035.git'. Below this, there is a section titled 'Creating a new repository on the command line' with the following commands: 'touch README.md' and 'git init'.

```

Hp Probook@DESKTOP-HB3S03U MINGW64 ~
$ cd ~/Lab-3
bash: cd: /c/Users/Hp Probook/Lab-3: No such file or directory

Hp Probook@DESKTOP-HB3S03U MINGW64 ~
$ cd ~/Maham-Saleem-035

Hp Probook@DESKTOP-HB3S03U MINGW64 ~/Maham-Saleem-035 (main)
$ cd ~/Lab-3
bash: cd: /c/Users/Hp Probook/Lab-3: No such file or directory

Hp Probook@DESKTOP-HB3S03U MINGW64 ~/Maham-Saleem-035 (main)
$ cd Lab-3

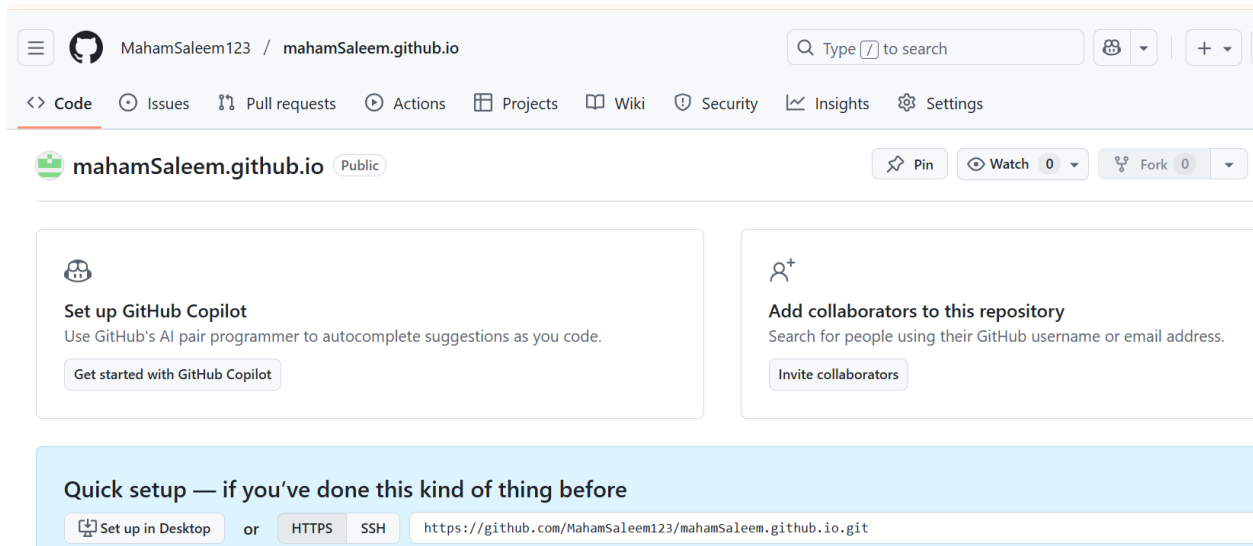
Hp Probook@DESKTOP-HB3S03U MINGW64 ~/Maham-Saleem-035/Lab-3 (main|REBASE 2/3)
$ pwd
/c/Users/Hp Probook/Maham-Saleem-035/Lab-3

227228c (HEAD) Added temporary text file
b7288b7 Added test line
c9fc7ca Resolve merge conflict in README.md
38c2c87 Add README.md file to main branch
b75f2fb Rename image.png to back_to_main.png
7c7b846 back_to_main.png

```

Task 11 – Creating a GitHub Pages Portfolio Site

github_pages_repo.png



push_static_site.png

```
Hp Probook@DESKTOP-HB3S03U MINGW64 ~/PortfolioSite (main)
$ git push -u origin main
Enumerating objects: 7, done.
Counting objects: 100% (7/7), done.
Delta compression using up to 8 threads
Compressing objects: 100% (4/4), done.
Writing objects: 100% (4/4), 2.68 KiB | 916.00 KiB/s, done.
Total 4 (delta 1), reused 0 (delta 0), pack-reused 0 (from 0)
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
remote: This repository moved. Please use the new location:
remote:   https://github.com/MahamSaleem123/mahamsaleem123.github.io.git
To https://github.com/MahamSaleem123/MahamSaleem123.github.io.git
   e40e9ce..6ad5f2c  main -> main
branch 'main' set up to track 'origin/main'.
```

Maham Saleem

Software Engineering Student

About Me

I am a passionate Software Engineering student at Fatima Jinnah Women University, currently in my 5th semester. I have a keen interest in cloud computing, web development, and software design.

Education

Degree: BS Software Engineering

University: Fatima Jinnah Women University

Roll Number: 2023-BSE-035

Current Semester: 5th (2025)

Skills

Cloud Computing

Git & GitHub

Version Control

HTML/CSS

JavaScript

Software Engineering

Web Development

Git LFS

Docker

Projects

Project 1: Cloud Computing Assignment - Git Workflow

Implemented complete Git workflow using Gitea, GitHub, Git LFS, and GitHub Pages for version control and deployment.

Contact

Email: maham.saleem@example.com

GitHub: github.com/your-username