

Name : Vedika Adheli
Roll No : 01
Devops Assignment : 02

Create a Project/ Repository :

From the Blank project tab, give the project a name and add a description. If you want it to be a public repository, click the Public option. Make sure the Initialize repository with README option is left unchecked. Then click the Create project button.

Devops > Assignment

A

Assignment

Project ID: 45556825

🔔

☆ Star 0

🍴 Fork 0

🔗 1 Commit

🌿 1 Branch

🏷️ 0 Tags

💾 0 Bytes Project Storage

Initial commit

Vedika Adheli authored 1 minute ago

114ed013

main

Assignment /

+

Find file

Web IDE

↓

↓

Clone

📄 README

📄 Add LICENSE

📄 Add CHANGELOG

📄 Add CONTRIBUTING

📄 Add Kubernetes cluster

📄 Set up CI/CD

📄 Add Wiki

⚙️ Configure Integrations

Name	Last commit	Last update
📄 README.md	Initial commit	1 minute ago

📄 README.md

Assignment

Clone the project :

After the project is created, the next step is to open a cmd and issue the 'git clone' command. But first, you will need the URL of the repository. We can find the URL by clicking on the big blue clone button on the landing page for the repository in the GitLab GUI. Copy the HTTP URL and then open a cmd.

 MINGW64:/d/Devops

```
Vedika@LAPTOP-E3MLJE2H MINGW64 /d/Devops
$ git clone https://gitlab.com/devops8665417/Assignment.git
Cloning into 'Assignment'...
remote: Enumerating objects: 3, done.
remote: Counting objects: 100% (3/3), done.
remote: Compressing objects: 100% (2/2), done.
remote: Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
Receiving objects: 100% (3/3), done.
```

```
Vedika@LAPTOP-E3MLJE2H MINGW64 /d/Devops
$ |
```

Create a file A1.txt add this file to staging area and commit the changes

 MINGW64:/d/Devops/Assignment

```
Vedika@LAPTOP-E3MLJE2H MINGW64 /d/Devops
$ cd Assignment

Vedika@LAPTOP-E3MLJE2H MINGW64 /d/Devops/Assignment (main)
$ git add "A1.txt"

Vedika@LAPTOP-E3MLJE2H MINGW64 /d/Devops/Assignment (main)
$ git commit -m "A1 added"
[main ea3797a] A1 added
1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 A1.txt

Vedika@LAPTOP-E3MLJE2H MINGW64 /d/Devops/Assignment (main)
$
```

Create file A2.rtf and add this file to staging area and commit the changes

← → ▾ ↑ This PC > DATA (D:) > Devops > Assignment				
Home	Name	Date modified	Type	Size
> Vedika - Personal	.git	28-04-2023 12:39 PM	File folder	
	A1	28-04-2023 12:38 PM	Text Document	0 KB
	A2	28-04-2023 12:41 PM	Rich Text Format	1 KB
	README	28-04-2023 12:37 PM	Markdown Source ...	7 KB
Desktop				
Downloads				
Documents				
Pictures				
Music				

```
MINGW64:/d/Devops/Assignment

Vedika@LAPTOP-E3MLJE2H MINGW64 /d/Devops/Assignment (main)
$ git add "A2.rtf"

Vedika@LAPTOP-E3MLJE2H MINGW64 /d/Devops/Assignment (main)
$ git commit -m "A2 added"
[main 036c4e0] A2 added
1 file changed, 1 insertion(+)
create mode 100644 A2.rtf

Vedika@LAPTOP-E3MLJE2H MINGW64 /d/Devops/Assignment (main)
$
```

Push Changes:

Now push these changes from local to remote repository. The Command is git push origin main

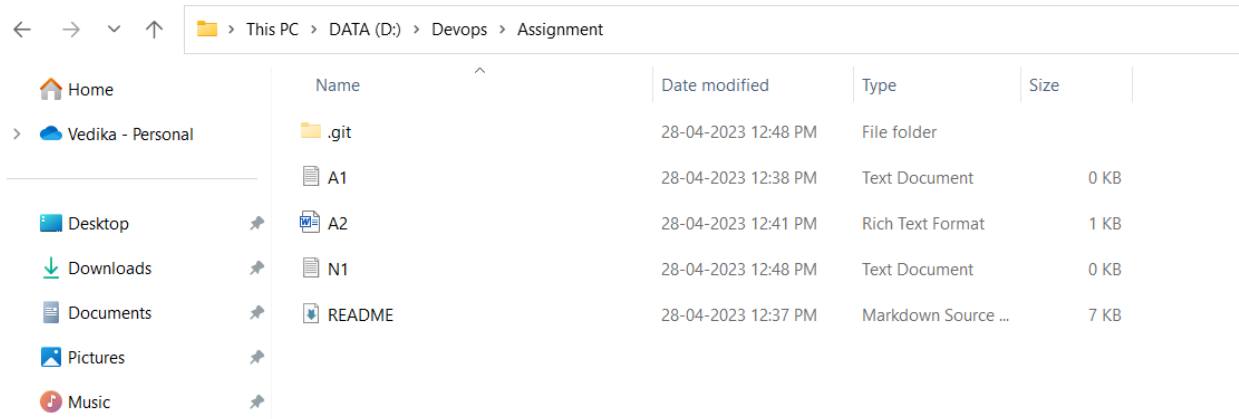
 MINGW64:/d/Devops/Assignment

```
Vedika@LAPTOP-E3MLJE2H MINGW64 /d/Devops/Assignment (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% (6/6), 539 bytes | 539.00 KiB/s, done.
Total 6 (delta 0), reused 0 (delta 0), pack-reused 0
To https://gitlab.com/devops8665417/Assignment.git
    114ed01..036c4e0  main -> main
branch 'main' set up to track 'origin/main'.
```

```
Vedika@LAPTOP-E3MLJE2H MINGW64 /d/Devops/Assignment (main)
$
```

Create New Branch :

Create a new branch with a name new. We can create a branch using git branch or by git checkout -b . Now,switch the branch using the git checkout new add N1.txt locally in the feature branch. Add and commit the changes in the feature branch.



	Name	Date modified	Type	Size
	.git	28-04-2023 12:48 PM	File folder	
	A1	28-04-2023 12:38 PM	Text Document	0 KB
	A2	28-04-2023 12:41 PM	Rich Text Format	1 KB
	N1	28-04-2023 12:48 PM	Text Document	0 KB
	README	28-04-2023 12:37 PM	Markdown Source ...	7 KB

```
MINGW64:/d/Devops/Assignment

Vedika@LAPTOP-E3MLJE2H MINGW64 /d/Devops/Assignment (main)
$ git checkout -b new
Switched to a new branch 'new'


Vedika@LAPTOP-E3MLJE2H MINGW64 /d/Devops/Assignment (new)
$ git add "N1.txt"


Vedika@LAPTOP-E3MLJE2H MINGW64 /d/Devops/Assignment (new)
$ git commit -m "N1 added"
[new 812d0c6] N1 added
1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 N1.txt

Vedika@LAPTOP-E3MLJE2H MINGW64 /d/Devops/Assignment (new)
$ |
```


In main, Create a new file A3.txt at a remote repository.





Devops > Assignment > Repository


**Add new file**
Vedika Adheli authored just now

768777b0

main ▾ Assignment / + ▾

HistoryFind fileWeb IDE ▾Clone ▾

Name	Last commit	Last update
 A1.txt	A1 added	12 minutes ago
 A2.rtf	A2 added	7 minutes ago
 A3.txt	Add new file	just now
 README.md	Initial commit	25 minutes ago

 README.md

Assignment

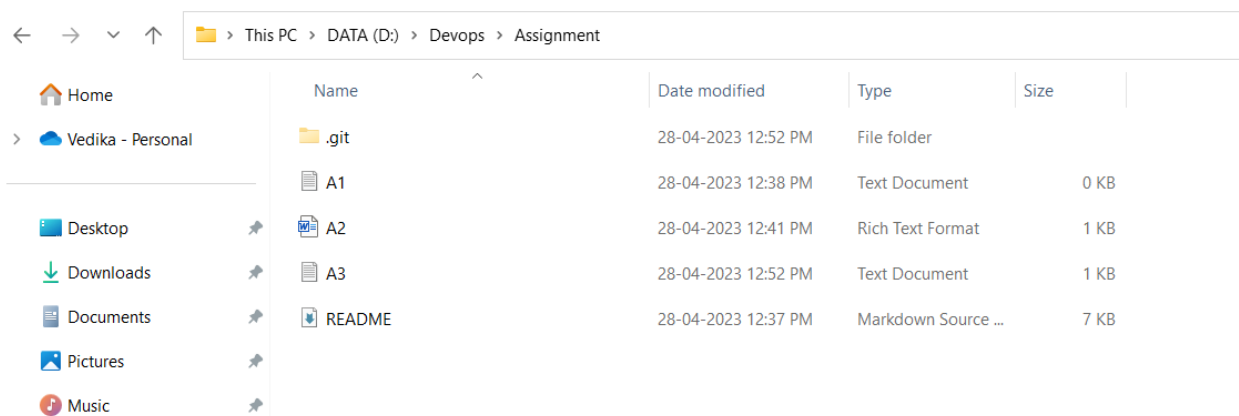
Pull Changes:

Here, new file A3.txt pulls the changes from remote to local repository so that all the changes will be pulled to local repository.

```
MINGW64:/d/Devops/Assignment

Vedika@LAPTOP-E3MLJE2H MINGW64 /d/Devops/Assignment (main)
$ git pull origin main
remote: Enumerating objects: 4, done.
remote: Counting objects: 100% (4/4), done.
remote: Compressing objects: 100% (2/2), done.
remote: Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
Unpacking objects: 100% (3/3), 313 bytes | 2.00 KiB/s, done.
From https://gitlab.com/devops8665417/Assignment
* branch          main      -> FETCH_HEAD
  036c4e0..768777b main      -> origin/main
Updating 036c4e0..768777b
Fast-forward
 A3.txt | 1 +
 1 file changed, 1 insertion(+)
 create mode 100644 A3.txt

Vedika@LAPTOP-E3MLJE2H MINGW64 /d/Devops/Assignment (main)
$ |
```



← → ▾ ▴ This PC > DATA (D:) > Devops > Assignment				
Home	Name	Date modified	Type	Size
Vedika - Personal	.git	28-04-2023 12:52 PM	File folder	
	A1	28-04-2023 12:38 PM	Text Document	0 KB
	A2	28-04-2023 12:41 PM	Rich Text Format	1 KB
	A3	28-04-2023 12:52 PM	Text Document	1 KB
	README	28-04-2023 12:37 PM	Markdown Source ...	7 KB

Merge Branches:

Merge feature branch with main branch using command `git merge feature`. To merge branches the command is `git merge`. Once the branches are merged we can see new commit of merged branches.

MINGW64:/d/Devops/Assignment

```
Vedika@LAPTOP-E3MLJE2H MINGW64 /d/Devops/Assignment (main)
$ git merge new -m "Merging new branch"
Merge made by the 'ort' strategy.
 N1.txt | 0
 1 file changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 N1.txt

Vedika@LAPTOP-E3MLJE2H MINGW64 /d/Devops/Assignment (main)
$
```

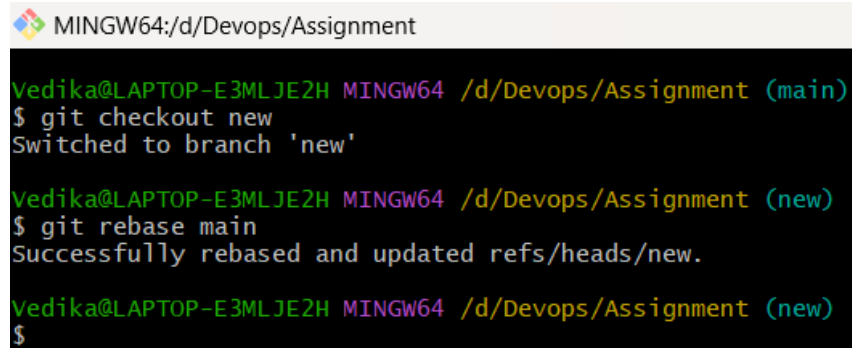
MINGW64:/d/Devops/Assignment

```
Vedika@LAPTOP-E3MLJE2H MINGW64 /d/Devops/Assignment (main)
$ git log --oneline
7176ff3 (HEAD -> main) Merging new branch
768777b (origin/main, origin/HEAD) Add new file
812d0c6 (new) N1 added
036c4e0 A2 added
ea3797a A1 added
114ed01 Initial commit

Vedika@LAPTOP-E3MLJE2H MINGW64 /d/Devops/Assignment (main)
$
```


Rebase branches:

Rebase two branches ie new and main here. The Git rebase command moves a branch to a new location at the head of another branch. The Git rebase command combines two source code branches into one.



A terminal window with a title bar that reads "MINGW64:/d/Devops/Assignment". The terminal shows the following commands and output:

```
Vedika@LAPTOP-E3MLJE2H MINGW64 /d/Devops/Assignment (main)
$ git checkout new
Switched to branch 'new'

Vedika@LAPTOP-E3MLJE2H MINGW64 /d/Devops/Assignment (new)
$ git rebase main
Successfully rebased and updated refs/heads/new.

Vedika@LAPTOP-E3MLJE2H MINGW64 /d/Devops/Assignment (new)
$
```

Squashing:

In GitLab squashing is achieved with a Rebase, of a special form called Interactive Rebase. To "squash" in Git means to combine multiple commits into one. You can do this at any point in time (by using Git's "Interactive Rebase" feature), though it is most often done when merging branches.

```
MINGW64:/d/Devops/Assignment
pick 036c4e0 A2 added
pick 768777b Add new file
pick 812d0c6 N1 added

# Rebase ea3797a..7176ff3 onto ea3797a (3 commands)
#
# Commands:
# p, pick <commit> = use commit
# r, reword <commit> = use commit, but edit the commit message
# e, edit <commit> = use commit, but stop for amending
# s, squash <commit> = use commit, but meld into previous commit
# f, fixup [-C | -c] <commit> = like "squash" but keep only the previous
#                               commit's log message, unless -C is used, in which case
#                               keep only this commit's message; -c is same as -C but
#                               opens the editor
# x, exec <command> = run command (the rest of the line) using shell
# b, break = stop here (continue rebase later with 'git rebase --continue')
# d, drop <commit> = remove commit
# l, label <label> = label current HEAD with a name
# t, reset <label> = reset HEAD to a label
# m, merge [-C <commit> | -c <commit>] <label> [# <oneline>]
#     create a merge commit using the original merge commit's
#     message (or the oneline, if no original merge commit was
#     specified); use -c <commit> to reword the commit message
# u, update-ref <ref> = track a placeholder for the <ref> to be updated
#                       to this position in the new commits. The <ref> is
#                       updated at the end of the rebase
#
# These lines can be re-ordered; they are executed from top to bottom.
#
# If you remove a line here THAT COMMIT WILL BE LOST.
#
# However, if you remove everything, the rebase will be aborted.
#
~
```

```
MINGW64:/d/Devops/Assignment

Vedika@LAPTOP-E3MLJE2H MINGW64 /d/Devops/Assignment (new)
$ git rebase -i HEAD~3
Successfully rebased and updated refs/heads/new.

Vedika@LAPTOP-E3MLJE2H MINGW64 /d/Devops/Assignment (new)
$
```

 MINGW64:/d/Devops/Assignment

Vedika@LAPTOP-E3MLJE2H MINGW64 /d/Devops/Assignment (new)

\$ git log --oneline

8fdb3be (HEAD -> new) N1 added

768777b (origin/main, origin/HEAD) Add new file

036c4e0 A2 added

ea3797a A1 added

114ed01 Initial commit

Vedika@LAPTOP-E3MLJE2H MINGW64 /d/Devops/Assignment (new)

\$

Delete Local and Remote Branches:

To delete a local branch Command is : Git branch -D

 MINGW64:/d/Devops/Assignment

```
Vedika@LAPTOP-E3MLJE2H MINGW64 /d/Devops/Assignment (main)
$ git branch -D new
Deleted branch new (was 8fdb3be).

Vedika@LAPTOP-E3MLJE2H MINGW64 /d/Devops/Assignment (main)
$ |
```

Undo Commit:

 MINGW64:/d/Devops/Assignment

```
Vedika@LAPTOP-E3MLJE2H MINGW64 /d/Devops/Assignment (main)
$ git log --oneline
7176ff3 (HEAD -> main) Merging new branch
768777b (origin/main, origin/HEAD) Add new file
812d0c6 N1 added
036c4e0 A2 added
ea3797a A1 added
114ed01 Initial commit
```

```
Vedika@LAPTOP-E3MLJE2H MINGW64 /d/Devops/Assignment (main)
$ git reset --soft 114ed01
```

```
Vedika@LAPTOP-E3MLJE2H MINGW64 /d/Devops/Assignment (main)
$ git log --oneline
114ed01 (HEAD -> main) Initial commit
```

```
Vedika@LAPTOP-E3MLJE2H MINGW64 /d/Devops/Assignment (main)
$ |
```