**Git hands-on 4**

**Objectives**

* Explain how to resolve the conflict during merge.

In this hands-on lab, you will learn how to:

* Implement conflict resolution when multiple users are updating the trunk (or master) in such a way that it results into a conflict with the branch’s modification.

**Prerequisites**

The following are the pre-requisites to complete this hands-on lab:

* Hands-on ID: **“Git-T03-HOL\_001”**

PRIYADARSNI@LAPTOP-L02QOMV0 MINGW64 ~

$ cd ~/gitdemo

PRIYADARSNI@LAPTOP-L02QOMV0 MINGW64 ~/gitdemo (master)

$ cd "full\_path\_to\_your\_repo\_folder"

bash: cd: full\_path\_to\_your\_repo\_folder: No such file or directory

PRIYADARSNI@LAPTOP-L02QOMV0 MINGW64 ~/gitdemo (master)

$ ls

error.log **log**/ newfile.txt welcome.txt

PRIYADARSNI@LAPTOP-L02QOMV0 MINGW64 ~/gitdemo (master)

$ ls -a

**.**/ **..**/ **.git**/ .gitignore error.log **log**/ newfile.txt welcome.txt

PRIYADARSNI@LAPTOP-L02QOMV0 MINGW64 ~/gitdemo (master)

$ git status

On branch master

Your branch is ahead of 'origin/master' by 1 commit.

(use "git push" to publish your local commits)

nothing to commit, working tree clean

PRIYADARSNI@LAPTOP-L02QOMV0 MINGW64 ~/gitdemo (master)

$ cd ~/gitdemo

PRIYADARSNI@LAPTOP-L02QOMV0 MINGW64 ~/gitdemo (master)

$ git status

On branch master

Your branch is ahead of 'origin/master' by 1 commit.

(use "git push" to publish your local commits)

nothing to commit, working tree clean

PRIYADARSNI@LAPTOP-L02QOMV0 MINGW64 ~/gitdemo (master)

$ git checkout master

Already on 'master'

Your branch is ahead of 'origin/master' by 1 commit.

(use "git push" to publish your local commits)

PRIYADARSNI@LAPTOP-L02QOMV0 MINGW64 ~/gitdemo (master)

$ git status

On branch master

Your branch is ahead of 'origin/master' by 1 commit.

(use "git push" to publish your local commits)

nothing to commit, working tree clean

PRIYADARSNI@LAPTOP-L02QOMV0 MINGW64 ~/gitdemo (master)

$ git checkout -b GitWork

Switched to a new branch 'GitWork'

PRIYADARSNI@LAPTOP-L02QOMV0 MINGW64 ~/gitdemo (GitWork)

$ echo "<message>Hello from GitWork</message>" > hello.xml

PRIYADARSNI@LAPTOP-L02QOMV0 MINGW64 ~/gitdemo (GitWork)

$ git status

On branch GitWork

Untracked files:

(use "git add <file>..." to include in what will be committed)

hello.xml

nothing added to commit but untracked files present (use "git add" to track)

PRIYADARSNI@LAPTOP-L02QOMV0 MINGW64 ~/gitdemo (GitWork)

$ git add hello.xml

warning: in the working copy of 'hello.xml', LF will be replaced by CRLF the next time Git touches it

PRIYADARSNI@LAPTOP-L02QOMV0 MINGW64 ~/gitdemo (GitWork)

$ git commit -m "Added hello.xml in GitWork branch"

[GitWork 6ed5e25] Added hello.xml in GitWork branch

1 file changed, 1 insertion(+)

create mode 100644 hello.xml

PRIYADARSNI@LAPTOP-L02QOMV0 MINGW64 ~/gitdemo (GitWork)

$ git checkout master

Switched to branch 'master'

Your branch is ahead of 'origin/master' by 1 commit.

(use "git push" to publish your local commits)

PRIYADARSNI@LAPTOP-L02QOMV0 MINGW64 ~/gitdemo (master)

$ echo "<message>Different message from master</message>" > hello.xml

PRIYADARSNI@LAPTOP-L02QOMV0 MINGW64 ~/gitdemo (master)

$ git add hello.xml

warning: in the working copy of 'hello.xml', LF will be replaced by CRLF the next time Git touches it

PRIYADARSNI@LAPTOP-L02QOMV0 MINGW64 ~/gitdemo (master)

$ git commit -m "Added hello.xml in master branch"

[master 02b51d0] Added hello.xml in master branch

1 file changed, 1 insertion(+)

create mode 100644 hello.xml

PRIYADARSNI@LAPTOP-L02QOMV0 MINGW64 ~/gitdemo (master)

$ git log --oneline --graph --decorate --all

\* 02b51d0 (**HEAD** -> **master**) Added hello.xml in master branch

| \* 6ed5e25 (**GitWork**) Added hello.xml in GitWork branch

|/

This message is displayed because 'diff.tool' is not configured.

See 'git difftool --tool-help' or 'git help config' for more details.

'git difftool' will now attempt to use one of the following tools:

opendiff kdiff3 tkdiff xxdiff meld kompare gvimdiff diffuse diffmerge ecmerge p4merge araxis bc codecompare smerge emerge vimdiff nvimdiff

2 files to edit

This message is displayed because 'merge.tool' is not configured.

See 'git mergetool --tool-help' or 'git help config' for more details.

'git mergetool' will now attempt to use one of the following tools:

opendiff kdiff3 tkdiff xxdiff meld tortoisemerge gvimdiff diffuse diffmerge ecmerge p4merge araxis bc codecompare smerge emerge vimdiff nvimdiff

Merging:

hello.xml

Normal merge conflict for 'hello.xml':

{local}: created file

{remote}: created file

Hit return to start merge resolution tool (vimdiff): r

3 files to edit

PRIYADARSNI@LAPTOP-L02QOMV0 MINGW64 ~/gitdemo (master|MERGING)

$ git mergetool

This message is displayed because 'merge.tool' is not configured.

See 'git mergetool --tool-help' or 'git help config' for more details.

'git mergetool' will now attempt to use one of the following tools:

opendiff kdiff3 tkdiff xxdiff meld tortoisemerge gvimdiff diffuse diffmerge ecmerge p4merge araxis bc codecompare smerge emerge vimdiff nvimdiff

No files need merging

PRIYADARSNI@LAPTOP-L02QOMV0 MINGW64 ~/gitdemo (master|MERGING)

$ git add hello.xml

git commit -m "Resolved conflict between master and GitWork"

[master eac6035] Resolved conflict between master and GitWork

PRIYADARSNI@LAPTOP-L02QOMV0 MINGW64 ~/gitdemo (master)

$ echo "\*.orig" >> .gitignore

git add .gitignore

git commit -m "Ignore backup merge files"

warning: in the working copy of '.gitignore', LF will be replaced by CRLF the next time Git touches it

[master f3885ae] Ignore backup merge files

1 file changed, 1 insertion(+)

PRIYADARSNI@LAPTOP-L02QOMV0 MINGW64 ~/gitdemo (master)

$ git branch -d GitWork

Deleted branch GitWork (was 6ed5e25).

PRIYADARSNI@LAPTOP-L02QOMV0 MINGW64 ~/gitdemo (master)

$ git log --oneline --graph --decorate

\* f3885ae (**HEAD** -> **master**) Ignore backup merge files

\* eac6035 Resolved conflict between master and GitWork

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| \* 6ed5e25 Added hello.xml in GitWork branch

\* | 02b51d0 Added hello.xml in master branch

|/

\* c895b70 (**GitNewBranch**) Added newfile.txt in GitNewBranch

\* 2aaa5d3 (**origin/master**) Added .gitignore to exclude log files and folders

\* 77f0529 Initial commit: Added welcome.txt

PRIYADARSNI@LAPTOP-L02QOMV0 MINGW64 ~/gitdemo (master)



