**Week 8 : GIT HandsOn 4**

**butra@bhanu\_0606 MINGW64 ~**

**$ cd GitDemo**

**butra@bhanu\_0606 MINGW64 ~/GitDemo (main)**

**$ git init**

**$ git checkout main**

Already on 'main'

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

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

**$ 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

**$ git commit -m "WIP: save work"**

[main ad708b1] WIP: save work

1 file changed, 1 insertion(+), 1 deletion(-)

**$ git checkout -b GitWork**

**$ cat > hello.xml <<EOF**

**$<greeting>Hello from branch</greeting>**

**$ EOF**

**$ git status**

On branch main

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

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

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: hello.xml

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

**$ git add hello.xml**

**$ git commit -m "Add hello.xml to GitWork branch"**

[main 57b654f] Add hello.xml to GitWork branch

1 file changed, 1 insertion(+), 1 deletion(-)

**$ cat > hello.xml << 'EOF'**

**$ <greeting>Hello from branch -updated</greeting>**

**$ EOF**

**$ git diff hello.xml**

**$ git config --global diff.tool vimdiff**

**$ git difftool master..GitWork -- hello.xml**

**Viewing (1/1): 'hello.xml'**

**Launch 'vimdiff' [Y/n]?** y

2 files to edit

**$ git merge GitWork**

Auto-merging hello.xml

CONFLICT (add/add): Merge conflict in hello.xml

Automatic merge failed; fix conflicts and then commit the result.

**butra@bhanu\_0606 MINGW64 ~/GitDemo (main|MERGING)**

**$ cat hello.xml**

<<<<<<< HEAD

<greeting>Hello from branch -updated</greeting>

=======

<message>Hello from main branch</message>

>>>>>>> GitWork

**$ vim hello.xml**

**$ git config --global merge.tool kdiff3**

**$ git mergetool**

Merging:

hello.xml

Normal merge conflict for 'hello.xml':

{local}: created file

{remote}: created file

The merge tool kdiff3 is not available as 'kdiff3.exe'

**$ notepad hello.xml**

<message>Hello from master branch and branch update</message>

**$ git add hello.xml**

**$ git commit -m "Resolve merge conflict in hello.xml and merge GitWork into main"**

[main af52fac] Resolve merge conflict in hello.xml and merge GitWork into main

**$ echo "hello.xml.orig" >> .gitignore**

**$ git add .gitignore**

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

**$ git commit -m "Ignore merge backup files"**

[main fa671cb] Ignore merge backup files

1 file changed, 1 insertion(+), 1 deletion(-)

**$ git branch -d GitWork**

Deleted branch GitWork (was 35fd5e0).

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

\* fa671cb (HEAD -> main) Ignore merge backup files

\* af52fac Resolve merge conflict in hello.xml and merge GitWork into main

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| \* 35fd5e0 Update hello.xml in main branch

| \* 580fe25 Update hello.xml in GitWork branch

| \* 23f6e8b Updated hello.xml in GitWork branch

| \* ceb76b0 Added hello.xml in GitWork branch

\* | ad708b1 WIP: save work

\* | 57b654f Add hello.xml to GitWork branch

\* | 8c344b4 Added hello.xml in main branch

\* | ea3b89c (origin/main, origin/HEAD) Added hello.xml in master branch

|/

\* 31d6792 Added branchfile.txt in GitNewBranch

\* 9dbc7be Add .gitignore to ignore .log files and log folder

\* eaeff2a Initial commit with welcome.txt

**$ git commit -m "resolve merge conflict in hello.xml and merge GitWork into master"**

On branch main

Your branch is ahead of 'origin/main' by 9 commits.

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

Untracked files:

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

hello\_BACKUP\_1685.xml

hello\_BASE\_1685.xml

hello\_LOCAL\_1685.xml

hello\_REMOTE\_1685.xml

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

**$ git push -u origin main**

Enumerating objects: 30, done.

Counting objects: 100% (29/29), done.

Delta compression using up to 16 threads

Compressing objects: 100% (19/19), done.

Writing objects: 100% (25/25), 2.49 KiB | 364.00 KiB/s, done.

Total 25 (delta 8), reused 0 (delta 0), pack-reused 0 (from 0)

remote: Resolving deltas: 100% (8/8), completed with 1 local object.

To https://github.com/bhanu0606/GitDemo.git

ea3b89c..fa671cb main -> main

branch 'main' set up to track 'origin/main'.

