**GIT Case study**

**Creating directory for the project**

[root@localhost Project1]# mkdir Harry

[root@localhost Project1]# mkdir Kane

[root@localhost Project1]# cd Harry/

[root@localhost Harry]# ls

**Initializing git**

[root@localhost Harry]# git init

Initialized empty Git repository in /home/git\_project/Project1/Harry/.git/

**Cloning the remote repo**

[root@localhost Harry]# git remote add origin https://github.com/\*\*\*\*\*\*\*\*\*\*\*/de vops\_course.git

[root@localhost Harry]# git pull origin master

remote: Enumerating objects: 54, done.

remote: Counting objects: 100% (54/54), done.

remote: Compressing objects: 100% (37/37), done.

remote: Total 54 (delta 13), reused 54 (delta 13), pack-reused 0

Unpacking objects: 100% (54/54), done.

From https://github.com/\*\*\*\*\*\*\*\*\*\*\*/devops\_course

\* branch master -> FETCH\_HEAD

\* [new branch] master -> origin/master

**Creating a branch**

[root@localhost Harry]# git branch harry

[root@localhost Harry]# git branch

harry

\* master

**Switching between branch**

[root@localhost Harry]# git checkout harry

Switched to branch 'harry'

[root@localhost Harry]# git branch

\* harry

master

[root@localhost Harry]# ls

chef docker git jenkins metadata.rb nagios puppet README.md vagrant

[root@localhost Harry]# echo "Testing harry">>test

**Committing the changes**

[root@localhost Harry]# git add test

[root@localhost Harry]# git commit -m "adding test file harry"

[harry a88bea8] adding test file harry

1 file changed, 1 insertion(+)

create mode 100644 test

[root@localhost Harry]# git merge master

Already up to date.

[root@localhost Harry]# git checkout master

Switched to branch 'master'

[root@localhost Harry]# git merge harry

Updating 24a808e..a88bea8

Fast-forward

test | 1 +

1 file changed, 1 insertion(+)

create mode 100644 test

[root@localhost Harry]# git push origin

fatal: The current branch master has no upstream branch.

To push the current branch and set the remote as upstream, use

git push --set-upstream origin master

[root@localhost Harry]# git push origin master

Username for 'https://github.com': \*\*\*\*\*\*\*\*\*\*\*

Password for 'https://\*\*\*\*\*\*\*\*\*\*\*@github.com':

Counting objects: 3, done.

Compressing objects: 100% (2/2), done.

Writing objects: 100% (3/3), 274 bytes | 274.00 KiB/s, done.

Total 3 (delta 1), reused 0 (delta 0)

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

To https://github.com/\*\*\*\*\*\*\*\*\*\*\*/devops\_course.git

24a808e..a88bea8 master -> master

**Developer 2 is perform changes**

[root@localhost Project1]# ls

Harry Kane

[root@localhost Project1]# cd Kane/

[root@localhost Kane]# ls

**Initializing git**

[root@localhost Kane]# git init

Initialized empty Git repository in /home/git\_project/Project1/Kane/.git/

[root@localhost Kane]# git remote add origin https://github.com/\*\*\*\*\*\*\*\*\*\*\*/dev ops\_course.git

[root@localhost Kane]# git pull origin master

remote: Enumerating objects: 54, done.

remote: Counting objects: 100% (54/54), done.

remote: Compressing objects: 100% (37/37), done.

remote: Total 54 (delta 13), reused 54 (delta 13), pack-reused 0

Unpacking objects: 100% (54/54), done.

From https://github.com/\*\*\*\*\*\*\*\*\*\*\*/devops\_course

\* branch master -> FETCH\_HEAD

\* [new branch] master -> origin/master

**Creating a new branch**

[root@localhost Kane]# git branch kane

[root@localhost Kane]# git branch

kane

\* master

[root@localhost Kane]# git checkout kane

Switched to branch 'kane'

[root@localhost Kane]# git branch

\* kane

master

[root@localhost Kane]# echo "Testing kane">>test

[root@localhost Kane]# git add test

[root@localhost Kane]# git commit -m " adding test file kane"

[kane 7050e23] adding test file kane

1 file changed, 1 insertion(+)

create mode 100644 test

[root@localhost Kane]# git checkout master

Switched to branch 'master'

[root@localhost Kane]# git merge kane

Updating 24a808e..7050e23

Fast-forward

test | 1 +

1 file changed, 1 insertion(+)

create mode 100644 test

[root@localhost Kane]# git push origin master

Username for 'https://github.com': \*\*\*\*\*\*\*\*\*\*\*

Password for 'https://\*\*\*\*\*\*\*\*\*\*\*@github.com':

To https://github.com/\*\*\*\*\*\*\*\*\*\*\*/devops\_course.git

! [rejected] master -> master (fetch first)

error: failed to push some refs to 'https://github.com/\*\*\*\*\*\*\*\*\*\*\*/devops\_cours e.git'

hint: Updates were rejected because the remote contains work that you do

hint: not have locally. This is usually caused by another repository pushing

hint: to the same ref. You may want to first integrate the remote changes

hint: (e.g., 'git pull ...') before pushing again.

hint: See the 'Note about fast-forwards' in 'git push --help' for details.

[root@localhost Kane]# git pull --rebase origin master

[root@localhost Kane]# git mergetool

<<<<<<<HEAD

Testing harry

==========

Testing kane

>>>>>>>>Kane

[root@localhost Kane]# git rebase --continue

Applying: kane

[root@localhost Kane]# git push origin master

Username for 'https://github.com': \*\*\*\*\*\*\*\*\*\*\*

Password for 'https://\*\*\*\*\*\*\*\*\*\*\*@github.com':

Counting objects: 3, done.

Compressing objects: 100% (2/2), done.

Writing objects: 100% (3/3), 274 bytes | 274.00 KiB/s, done.

Total 3 (delta 1), reused 0 (delta 0)

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

To https://github.com/\*\*\*\*\*\*\*\*\*\*\*/devops\_course.git

bf9d87b..48379ef master -> master