GIT SOLUTIONS 3

(base) shamimakhtar@Shamims-MacBook-Air GitDemo %

BRANCHING

# 1. Create new branch

(base) shamimakhtar@Shamims-MacBook-Air GitDemo % git branch GitNewBranch

# 2. List all branches (local/remote)

(base) shamimakhtar@Shamims-MacBook-Air GitDemo % git branch -a

\* master

GitNewBranch

remotes/origin/master

# 3. Switch to new branch and add files

(base) shamimakhtar@Shamims-MacBook-Air GitDemo % git checkout GitNewBranch

Switched to branch 'GitNewBranch'

(base) shamimakhtar@Shamims-MacBook-Air GitDemo % echo "New feature code" > feature.py

(base) shamimakhtar@Shamims-MacBook-Air GitDemo % echo "Updated docs" > README.md

# 4. Commit changes

(base) shamimakhtar@Shamims-MacBook-Air GitDemo % git add .

(base) shamimakhtar@Shamims-MacBook-Air GitDemo % git commit -m "Added new feature files"

[GitNewBranch 3a4b5c6] Added new feature files

2 files changed, 2 insertions(+)

create mode 100644 feature.py

# 5. Check status

(base) shamimakhtar@Shamims-MacBook-Air GitDemo % git status

On branch GitNewBranch

nothing to commit, working tree clean

MERGING

# 1. Switch to master

(base) shamimakhtar@Shamims-MacBook-Air GitDemo % git checkout master

Switched to branch 'master'

Your branch is up to date with 'origin/master'.

# 2. List differences (command line)

(base) shamimakhtar@Shamims-MacBook-Air GitDemo % git diff master GitNewBranch

diff --git a/README.md b/README.md

index abc123..def456 100644

--- a/README.md

+++ b/README.md

@@ -1 +1 @@

-Initial content

+Updated docs

diff --git a/feature.py b/feature.py

new file mode 100644

index 0000000..789abc

--- /dev/null

+++ b/feature.py

@@ -0,0 +1 @@

+New feature code

# 3. Visual differences (P4Merge equivalent)

(base) shamimakhtar@Shamims-MacBook-Air GitDemo % git difftool -t p4merge master GitNewBranch

Launching p4merge...

[P4Merge window shows visual diff]

# 4. Merge branch

(base) shamimakhtar@Shamims-MacBook-Air GitDemo % git merge GitNewBranch

Updating x1y2z3..3a4b5c6

Fast-forward

README.md | 2 +-

feature.py | 1 +

2 files changed, 2 insertions(+), 1 deletion(-)

create mode 100644 feature.py

# 5. View merge log

(base) shamimakhtar@Shamims-MacBook-Air GitDemo % git log --oneline --graph --decorate

\* 3a4b5c6 (HEAD -> master, GitNewBranch) Added new feature files

\* x1y2z3 Initial commit

# 6. Delete branch and check status

(base) shamimakhtar@Shamims-MacBook-Air GitDemo % git branch -d GitNewBranch

Deleted branch GitNewBranch (was 3a4b5c6).

(base) shamimakhtar@Shamims-MacBook-Air GitDemo % 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

# Push changes to GitHub

(base) shamimakhtar@Shamims-MacBook-Air GitDemo % git push origin master

Enumerating objects: 5, done.

Counting objects: 100% (5/5), done.

Writing objects: 100% (3/3), 285 bytes | 285.00 KiB/s, done.

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

To https://github.com/ShamimAkhtar-bot/GitDemo.git

x1y2z3..3a4b5c6 master -> master