TCSS 502 Assignment: Git and GitHub

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Date: 11/16/2021

Contents:

A. Create local repository (SC)

```
Tapasya@Mac-Windows MINGW64 ~/pycharmProjects/tcss502
$ mkdir git_demo

Tapasya@Mac-Windows MINGW64 ~/pycharmProjects/tcss502
$ cd git_demo

Tapasya@Mac-Windows MINGW64 ~/pycharmProjects/tcss502/git_demo
$ ls

Tapasya@Mac-Windows MINGW64 ~/pycharmProjects/tcss502/git_demo
$ ls -la
total 4
drwxr-xr-x 1 Tapasya 197121 0 Nov 15 15:42 ./
drwxr-xr-x 1 Tapasya 197121 0 Nov 15 15:42 ../
```

      i. add a couple files to the repo (SC)

```
Tapasya@Mac-Windows MINGW64 ~/pycharmProjects/tcss502/git_demo
$ touch my_first_file.txt

Tapasya@Mac-Windows MINGW64 ~/pycharmProjects/tcss502/git_demo
$ touch my_second_file.txt

Tapasya@Mac-Windows MINGW64 ~/pycharmProjects/tcss502/git_demo
$ git init
Initialized empty Git repository in C:/Users/Tapasya/PycharmProjects/tcss502/git_demo/.g

Tapasya@Mac-Windows MINGW64 ~/pycharmProjects/tcss502/git_demo (master)
$ ls
my_first_file.txt  my_second_file.txt
```

      ii. create another branch and add a file to that branch (SC)

```
Tapasya@Mac-Windows MINGW64 ~/pycharmProjects/tcss502/git_demo (master)
$ git checkout -b new_branch
Switched to a new branch 'new_branch'

Tapasya@Mac-Windows MINGW64 ~/pycharmProjects/tcss502/git_demo (new_branch)
$ touch my_new_branch_file.txt

Tapasya@Mac-Windows MINGW64 ~/pycharmProjects/tcss502/git_demo (new_branch)
$ ls
my_first_file.txt  my_new_branch_file.txt  my_second_file.txt
```

iii. merge the contents of that branch into master/main branch (SC)

```
Tapasya@Mac-Windows MINGW64 ~/pycharmProjects/tcss502/git_demo (new_branch)
$ git add .

Tapasya@Mac-Windows MINGW64 ~/pycharmProjects/tcss502/git_demo (new_branch)
$ git commit -m "initial commit"
[new_branch (root-commit) 24f725f] initial commit
 3 files changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 my_first_file.txt
 create mode 100644 my_new_branch_file.txt
 create mode 100644 my_second_file.txt

Tapasya@Mac-Windows MINGW64 ~/pycharmProjects/tcss502/git_demo (new_branch)
$ git status
On branch new_branch
nothing to commit, working tree clean

Tapasya@Mac-Windows MINGW64 ~/pycharmProjects/tcss502/git_demo (new_branch)
$ git checkout main
error: pathspec 'main' did not match any file(s) known to git

Tapasya@Mac-Windows MINGW64 ~/pycharmProjects/tcss502/git_demo (new_branch)
$ git checkout -b main
Switched to a new branch 'main'

Tapasya@Mac-Windows MINGW64 ~/pycharmProjects/tcss502/git_demo (main)
$ git merge new_branch
Already up to date.

Tapasya@Mac-Windows MINGW64 ~/pycharmProjects/tcss502/git_demo (main)
$ ls
my_first_file.txt  my_new_branch_file.txt  my_second_file.txt

Tapasya@Mac-Windows MINGW64 ~/pycharmProjects/tcss502/git_demo (main)
$ git log
commit 24f725f3bdf413254a6453e45e60aca960e29e6c (HEAD -> main, new_branch)
Author: Tapasya Khatri <takhat014@gmail.com>
Date:   Mon Nov 15 15:48:42 2021 -0800

    initial commit
```
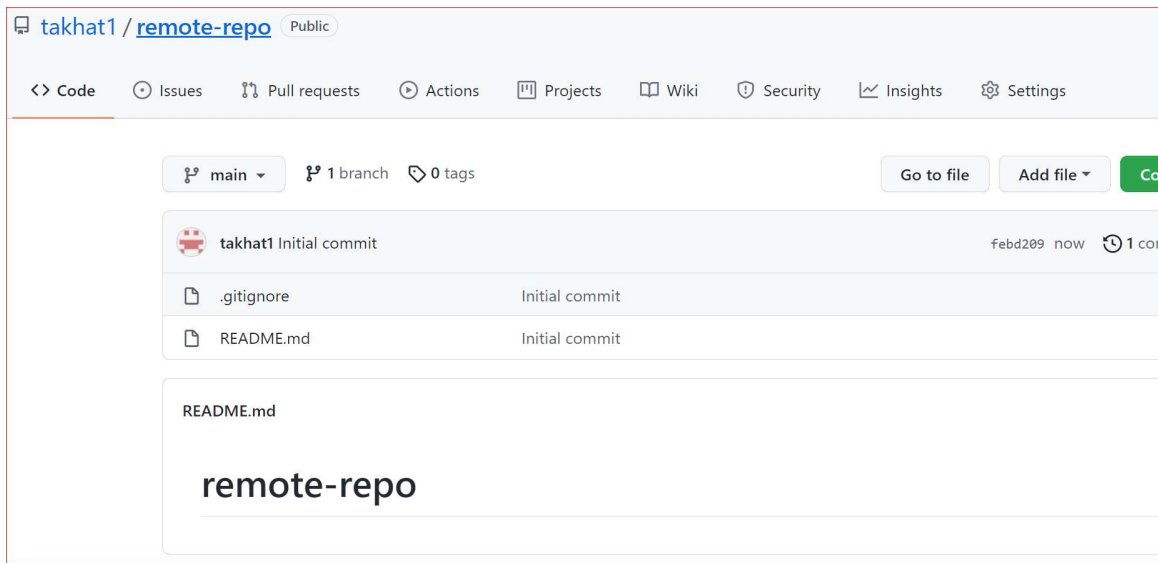
B. Create an account on GitHub and create an empty repo on GitHub (SC)

a. i. copy (push) contents of local repository to empty repository on GitHub (SC)

```
MINGW64:/c/Users/Tapasya/pycharmProjects/tcss502/local_repo

Tapasya@Mac-Windows MINGW64 ~/pycharmProjects/tcss502/local_repo (master)
$ git init
Initialized empty Git repository in C:/Users/Tapasya/PycharmProjects/tcss502/l
al_repo/.git/

Tapasya@Mac-Windows MINGW64 ~/pycharmProjects/tcss502/local_repo (master)
$ touch test.txt

Tapasya@Mac-Windows MINGW64 ~/pycharmProjects/tcss502/local_repo (master)
$ git status
On branch master

No commits yet

Untracked files:
  (use "git add <file>..." to include in what will be committed)
        test.txt

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

Tapasya@Mac-Windows MINGW64 ~/pycharmProjects/tcss502/local_repo (master)
$ git add .

Tapasya@Mac-Windows MINGW64 ~/pycharmProjects/tcss502/local_repo (master)
$ git commit -m "added test.txt"
[master (root-commit) ac9da94] added test.txt
 1 file changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 test.txt

Tapasya@Mac-Windows MINGW64 ~/pycharmProjects/tcss502/local_repo (master)
$ git branch -M main

Tapasya@Mac-Windows MINGW64 ~/pycharmProjects/tcss502/local_repo (main)
$ git remote add origin https://github.com/takhat1/remote-repo.git
```

        a. ii. add a file to the repo on GitHub then pull that file to your local
machine (SC)

```
Tapasya@Mac-Windows MINGW64 ~/pycharmProjects/tcss502/local_repo (main)
$ git pull origin main --allow-unrelated-histories
From https://github.com/takhat1/remote-repo
 * branch            main       -> FETCH_HEAD
Merge made by the 'recursive' strategy.
 .gitignore | 129 +++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
 README.md  |   1 +
 2 files changed, 130 insertions(+)
 create mode 100644 .gitignore
 create mode 100644 README.md

Tapasya@Mac-Windows MINGW64 ~/pycharmProjects/tcss502/local_repo (main)
$ git push -u origin main
Enumerating objects: 6, done.
Counting objects: 100% (6/6), done.
Delta compression using up to 8 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (5/5), 524 bytes | 104.00 KiB/s, done.
Total 5 (delta 0), reused 0 (delta 0), pack-reused 0
To https://github.com/takhat1/remote-repo.git
   febd209..526cd62  main -> main
Branch 'main' set up to track remote branch 'main' from 'origin'.

Tapasya@Mac-Windows MINGW64 ~/pycharmProjects/tcss502/local_repo (main)
$ ls
README.md   test.txt

Tapasya@Mac-Windows MINGW64 ~/pycharmProjects/tcss502/local_repo (main)
$ git log
commit 526cd62c52dc8f4a755540ac58c7cd8517fb29ca (HEAD -> main, origin/main)
Merge: ac9da94 febd209
Author: takhat1 <tk14@uw.edu>
Date:   Tue Nov 16 14:51:49 2021 -0800

    Merge branch 'main' of https://github.com/takhat1/remote-repo

commit ac9da945270c59771c3ba3e56acc0f6845badbf0
Author: takhat1 <tk14@uw.edu>
Date:   Tue Nov 16 14:43:57 2021 -0800

    added test.txt

commit febd2090b0e21e034f8d89fc13340c9087581d7f
Author: takhat1 <94266167+takhat1@users.noreply.github.com>
Date:   Tue Nov 16 14:03:25 2021 -0800

    Initial commit
```

a. iii. add another file to your local repo and push that to GitHub (SC)

done in a.i. above

Added test.txt

b. create another repo on GitHub and clone it to your machine (SC)

c. invite your team members to one of your repos on GitHub (SC)

c. i. have them clone the repo to their local machine (SC)
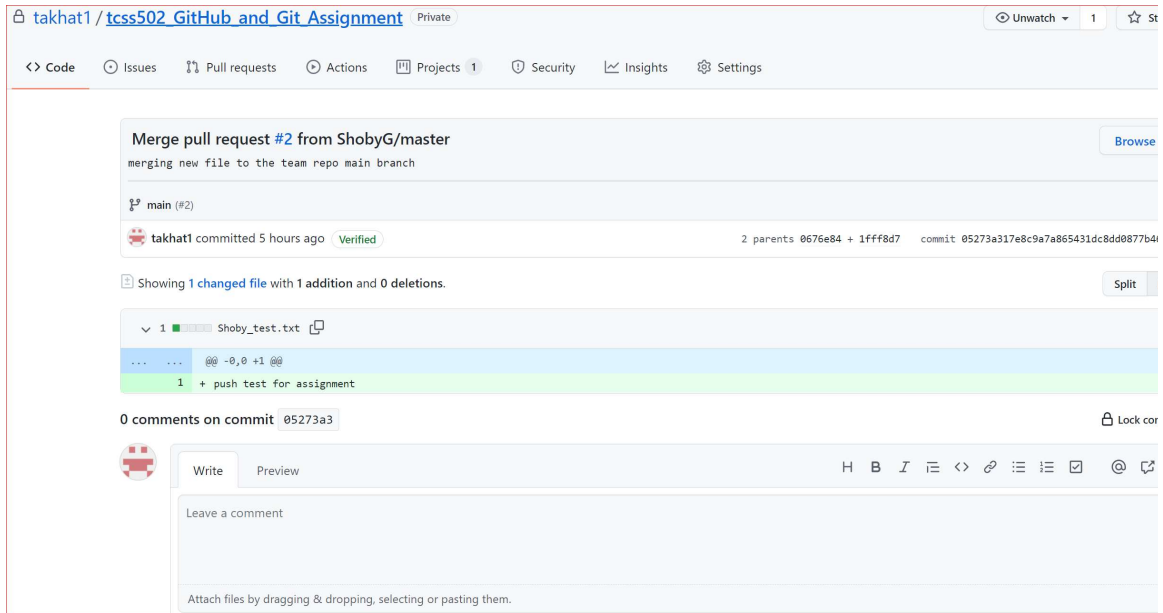
c. ii. have them create their own branch in that repo on their local machine then push the new branch up to GitHub (SC)
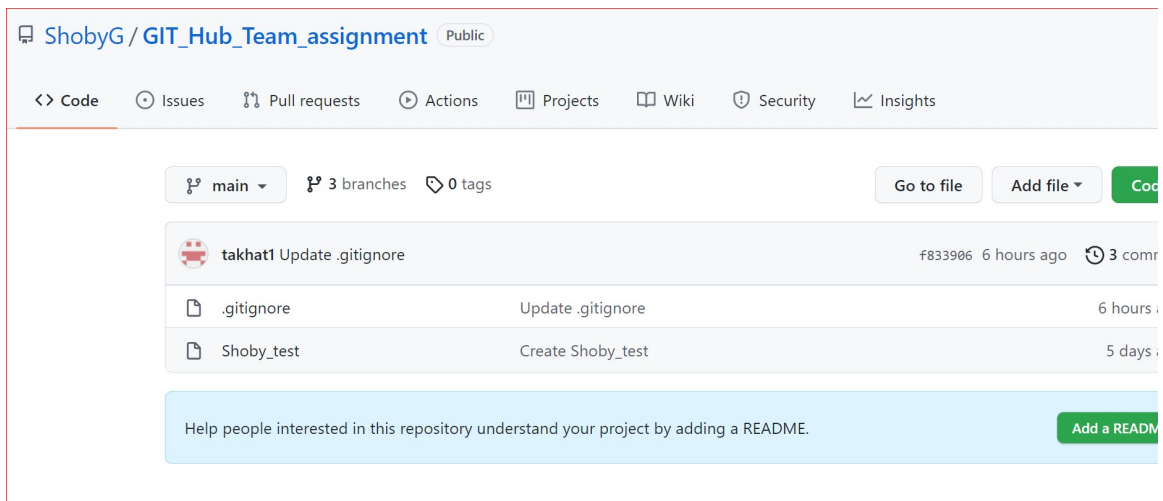
c. iii. have each team member add a file to the master/main branch from their local machine and push that up to GitHub (SC)

shown in c ii. above

c. iv. practice push/pull with GitHub repo to make sure everyone stays in synch with the files on GitHub (SC as necessary to show this)

Contribution activity   2021

November 2021

Created 9 commits in 4 repositories

takhat1/remote-repo 3 commits

takhat1/tcss502_GitHub_and_Git_Assignment 3 commits

ShobyG/GIT_Hub_Team_assignment 2 commits

joshden20/improved-spork 1 commit
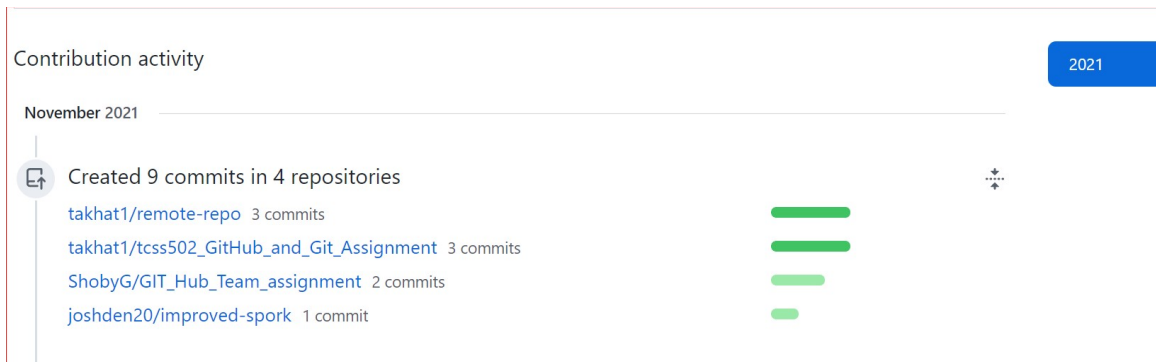
Appendix: Full Screenshots

working with local repo

```
MINGW64:/c/Users/Tapasya/pycharmProjects/tcss502/local_repo

Tapasya@Mac-Windows MINGW64 ~/pycharmProjects/tcss502/local_repo (master)
$ git init
Initialized empty Git repository in C:/Users/Tapasya/PycharmProjects/tcss502/loc
al_repo/.git/

Tapasya@Mac-Windows MINGW64 ~/pycharmProjects/tcss502/local_repo (master)
$ touch test.txt

Tapasya@Mac-Windows MINGW64 ~/pycharmProjects/tcss502/local_repo (master)
$ git status
On branch master

No commits yet

Untracked files:
  (use "git add <file>..." to include in what will be committed)
        test.txt

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

Tapasya@Mac-Windows MINGW64 ~/pycharmProjects/tcss502/local_repo (master)
$ git add .

Tapasya@Mac-Windows MINGW64 ~/pycharmProjects/tcss502/local_repo (master)
$ git commit -m "added test.txt"
[master (root-commit) ac9da94] added test.txt
 1 file changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 test.txt

Tapasya@Mac-Windows MINGW64 ~/pycharmProjects/tcss502/local_repo (master)
$ git branch -M main

Tapasya@Mac-Windows MINGW64 ~/pycharmProjects/tcss502/local_repo (main)
$ git remote add origin https://github.com/takhat1/remote-repo.git

Tapasya@Mac-Windows MINGW64 ~/pycharmProjects/tcss502/local_repo (main)
$ git pull origin main
remote: Enumerating objects: 4, done.
remote: Counting objects: 100% (4/4), done.
remote: Compressing objects: 100% (3/3), done.
remote: Total 4 (delta 0), reused 0 (delta 0), pack-reused 0
Unpacking objects: 100% (4/4), 1.56 KiB | 36.00 KiB/s, done.
From https://github.com/takhat1/remote-repo
 * branch            main       -> FETCH_HEAD
 * [new branch]      main       -> origin/main
fatal: refusing to merge unrelated histories

Tapasya@Mac-Windows MINGW64 ~/pycharmProjects/tcss502/local_repo (main)
$ git pull origin main --allow-unrelated-histories
From https://github.com/takhat1/remote-repo
 * branch            main       -> FETCH_HEAD
Merge made by the 'recursive' strategy.
 .gitignore | 129 +++++++++++++++++++++++++++++++++++++++++++++++++++++++++
 README.md  |   1 +
 2 files changed, 130 insertions(+)
 create mode 100644 .gitignore
 create mode 100644 README.md

Tapasya@Mac-Windows MINGW64 ~/pycharmProjects/tcss502/local_repo (main)
$ git push -u origin main
Enumerating objects: 6, done.
Counting objects: 100% (6/6), done.
Delta compression using up to 8 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (5/5), 524 bytes | 104.00 KiB/s, done.
Total 5 (delta 0), reused 0 (delta 0), pack-reused 0
To https://github.com/takhat1/remote-repo.git
   febd209..526cd62  main -> main
Branch 'main' set up to track remote branch 'main' from 'origin'.

Tapasya@Mac-Windows MINGW64 ~/pycharmProjects/tcss502/local_repo (main)
$ ls
README.md   test.txt

Tapasya@Mac-Windows MINGW64 ~/pycharmProjects/tcss502/local_repo (main)
$ git log
commit 526cd62c52dc8f4a755540ac58c7cd8517fb29ca (HEAD -> main, origin/main)
Merge: ac9da94 febd209
Author: takhat1 <tk14@uw.edu>
Date:   Tue Nov 16 14:51:49 2021 -0800

    Merge branch 'main' of https://github.com/takhat1/remote-repo

commit ac9da945270c59771c3ba3e56acc0f6845badbf0
Author: takhat1 <tk14@uw.edu>
Date:   Tue Nov 16 14:43:57 2021 -0800

    added test.txt

commit febd2090b0e21e034f8d89fc13340c9087581d7f
Author: takhat1 <94266167+takhat1@users.noreply.github.com>
Date:   Tue Nov 16 14:03:25 2021 -0800

    Initial commit
```

working with your own local and remote repos

```
MINGW64:/c/Users/Tapasya/pycharmProjects/tcss502/local_repo

Tapasya@Mac-Windows MINGW64 ~/pycharmProjects/tcss502/local_repo (master)
$ git init
Initialized empty Git repository in C:/Users/Tapasya/PycharmProjects/tcss502/loc
al_repo/.git/

Tapasya@Mac-Windows MINGW64 ~/pycharmProjects/tcss502/local_repo (master)
$ touch test.txt

Tapasya@Mac-Windows MINGW64 ~/pycharmProjects/tcss502/local_repo (master)
$ git status
On branch master

No commits yet

Untracked files:
  (use "git add <file>..." to include in what will be committed)
        test.txt

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

Tapasya@Mac-Windows MINGW64 ~/pycharmProjects/tcss502/local_repo (master)
$ git add .

Tapasya@Mac-Windows MINGW64 ~/pycharmProjects/tcss502/local_repo (master)
$ git commit -m "added test.txt"
[master (root-commit) ac9da94] added test.txt
 1 file changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 test.txt

Tapasya@Mac-Windows MINGW64 ~/pycharmProjects/tcss502/local_repo (master)
$ git branch -M main

Tapasya@Mac-Windows MINGW64 ~/pycharmProjects/tcss502/local_repo (main)
$ git remote add origin https://github.com/takhat1/remote-repo.git

Tapasya@Mac-Windows MINGW64 ~/pycharmProjects/tcss502/local_repo (main)
$ git pull origin main
remote: Enumerating objects: 4, done.
remote: Counting objects: 100% (4/4), done.
remote: Compressing objects: 100% (3/3), done.
remote: Total 4 (delta 0), reused 0 (delta 0), pack-reused 0
Unpacking objects: 100% (4/4), 1.56 KiB | 36.00 KiB/s, done.
From https://github.com/takhat1/remote-repo
 * branch            main       -> FETCH_HEAD
 * [new branch]      main       -> origin/main
fatal: refusing to merge unrelated histories

Tapasya@Mac-Windows MINGW64 ~/pycharmProjects/tcss502/local_repo (main)
$ git pull origin main --allow-unrelated-histories
From https://github.com/takhat1/remote-repo
 * branch            main       -> FETCH_HEAD
Merge made by the 'recursive' strategy.
 .gitignore | 129 ++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
 README.md  |   1 +
 2 files changed, 130 insertions(+)
 create mode 100644 .gitignore
 create mode 100644 README.md

Tapasya@Mac-Windows MINGW64 ~/pycharmProjects/tcss502/local_repo (main)
$ git push -u origin main
Enumerating objects: 6, done.
Counting objects: 100% (6/6), done.
Delta compression using up to 8 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (5/5), 524 bytes | 104.00 KiB/s, done.
Total 5 (delta 0), reused 0 (delta 0), pack-reused 0
To https://github.com/takhat1/remote-repo.git
   febd209..526cd62  main -> main
Branch 'main' set up to track remote branch 'main' from 'origin'.

Tapasya@Mac-Windows MINGW64 ~/pycharmProjects/tcss502/local_repo (main)
$ ls
README.md  test.txt

Tapasya@Mac-Windows MINGW64 ~/pycharmProjects/tcss502/local_repo (main)
$ git log
commit 526cd62c52dc8f4a755540ac58c7cd8517fb29ca (HEAD -> main, origin/main)
Merge: ac9da94 febd209
Author: takhat1 <tk14@uw.edu>
Date:   Tue Nov 16 14:51:49 2021 -0800

    Merge branch 'main' of https://github.com/takhat1/remote-repo

commit ac9da945270c59771c3ba3e56acc0f6845badbf0
Author: takhat1 <tk14@uw.edu>
Date:   Tue Nov 16 14:43:57 2021 -0800

    added test.txt

commit febd2090b0e21e034f8d89fc13340c9087581d7f
Author: takhat1 <94266167+takhat1@users.noreply.github.com>
Date:   Tue Nov 16 14:03:25 2021 -0800

    Initial commit
```

```
MINGW64:/c/Users/Tapasya/pycharmProjects/tcss502/git_assignment_local_cloned_repo

Tapasya@Mac-Windows MINGW64 ~/pycharmProjects/tcss502/git_assignment_local_clone
d_repo (master)
$ git clone https://github.com/ShobyG/GIT_Hub_Team_assignment.git .
Cloning into '.'...
remote: Enumerating objects: 3, done.
remote: Counting objects: 100% (3/3), done.
remote: Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
Receiving objects: 100% (3/3), done.

Tapasya@Mac-Windows MINGW64 ~/pycharmProjects/tcss502/git_assignment_local_clone
d_repo (main)
$ git branch Tapasya

Tapasya@Mac-Windows MINGW64 ~/pycharmProjects/tcss502/git_assignment_local_clone
d_repo (main)
$ git checkout Tapasya
Switched to branch 'Tapasya'

Tapasya@Mac-Windows MINGW64 ~/pycharmProjects/tcss502/git_assignment_local_clone
d_repo (Tapasya)
$ git add .

Tapasya@Mac-Windows MINGW64 ~/pycharmProjects/tcss502/git_assignment_local_clone
d_repo (Tapasya)
$ git commit -m "adding a new branch created locally"
On branch Tapasya
nothing to commit, working tree clean

Tapasya@Mac-Windows MINGW64 ~/pycharmProjects/tcss502/git_assignment_local_clone
d_repo (Tapasya)
$ git push -u origin Tapasya
Total 0 (delta 0), reused 0 (delta 0), pack-reused 0
remote:
remote: Create a pull request for 'Tapasya' on GitHub by visiting:
remote:      https://github.com/ShobyG/GIT_Hub_Team_assignment/pull/new/Tapasya
remote:
To https://github.com/ShobyG/GIT_Hub_Team_assignment.git
 * [new branch]      Tapasya -> Tapasya
Branch 'Tapasya' set up to track remote branch 'Tapasya' from 'origin'.

Tapasya@Mac-Windows MINGW64 ~/pycharmProjects/tcss502/git_assignment_local_clone
d_repo (Tapasya)
$ git branch -a
* Tapasya
  main
  remotes/origin/HEAD -> origin/main
  remotes/origin/Tapasya
  remotes/origin/main
  remotes/origin/tapasya

Tapasya@Mac-Windows MINGW64 ~/pycharmProjects/tcss502/git_assignment_local_clone
d_repo (Tapasya)
$ git checkout main
Switched to branch 'main'
Your branch is up to date with 'origin/main'.

Tapasya@Mac-Windows MINGW64 ~/pycharmProjects/tcss502/git_assignment_local_clone
d_repo (main)
$ git pull origin main
From https://github.com/ShobyG/GIT_Hub_Team_assignment
 * branch          main       -> FETCH_HEAD
Already up to date.

Tapasya@Mac-Windows MINGW64 ~/pycharmProjects/tcss502/git_assignment_local_clone
d_repo (main)
$ git branch --merged
  Tapasya
* main
```

```
Tapasya@Mac-Windows MINGW64 ~/pycharmProjects/tcss502/git_assignment_local_cloned_repo (main)
$ touch .gitignore

Tapasya@Mac-Windows MINGW64 ~/pycharmProjects/tcss502/git_assignment_local_cloned_repo (main)
$ git status
On branch main
Your branch is up to date with 'origin/main'.

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

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

Tapasya@Mac-Windows MINGW64 ~/pycharmProjects/tcss502/git_assignment_local_cloned_repo (main)
$ git add .

Tapasya@Mac-Windows MINGW64 ~/pycharmProjects/tcss502/git_assignment_local_cloned_repo (main)
$ git commit -m "added .gitignore file"
[main 89ab432] added .gitignore file
 1 file changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 .gitignore

Tapasya@Mac-Windows MINGW64 ~/pycharmProjects/tcss502/git_assignment_local_cloned_repo (main)
$ git pull origin master
fatal: couldn't find remote ref master

Tapasya@Mac-Windows MINGW64 ~/pycharmProjects/tcss502/git_assignment_local_cloned_repo (main)
$ git pull origin main
From https://github.com/ShobyG/GIT_Hub_Team_assignment
 * branch            main       -> FETCH_HEAD
Already up to date.

Tapasya@Mac-Windows MINGW64 ~/pycharmProjects/tcss502/git_assignment_local_cloned_repo (main)
$ git push origin main
Enumerating objects: 4, done.
Counting objects: 100% (4/4), done.
Delta compression using up to 8 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 273 bytes | 273.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
To https://github.com/ShobyG/GIT_Hub_Team_assignment.git
   4fa57dd..89ab432  main -> main

Tapasya@Mac-Windows MINGW64 ~/pycharmProjects/tcss502/git_assignment_local_cloned_repo (main)
$ git log
commit 89ab432c46f9195d8633b0dcd1155101716a3dd1 (HEAD -> main, origin/main, origin/HEAD)
Author: takhat1 <tk14@uw.edu>
Date:   Tue Nov 16 11:20:29 2021 -0800

    added .gitignore file

commit 4fa57ddfac5d57e6350e59380cb049012665d8ae (origin/tapasya, origin/Tapasya)
Author: ShobyG <91856251+ShobyG@users.noreply.github.com>
Date:   Thu Nov 11 19:00:29 2021 -0800

    Create Shoby_test

Tapasya@Mac-Windows MINGW64 ~/pycharmProjects/tcss502/git_assignment_local_cloned_repo (main)
$
```

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