

Module 2

Github Assignment

We will set up the git repository on disk first

```
amogh@pop-os:~/Programming/NexTurn_Assignments/Module2/M2_git_assignment$ git init
hint: Using 'master' as the name for the initial branch. This default branch name
hint: is subject to change. To configure the initial branch name to use in all
hint: of your new repositories, which will suppress this warning, call:
hint:
hint:   git config --global init.defaultBranch <name>
hint:
hint: Names commonly chosen instead of 'master' are 'main', 'trunk' and
hint: 'development'. The just-created branch can be renamed via this command:
hint:
hint:   git branch -m <name>
Initialized empty Git repository in /home/amogh/Programming/NexTurn_Assignments/Module2/M2_git_assignment/.git
/
```

Then, we will add, commit and connect it to our github repository

```
amogh@pop-os:~/Programming/NexTurn_Assignments/Module2/M2_git_assignment$ git add .
amogh@pop-os:~/Programming/NexTurn_Assignments/Module2/M2_git_assignment$ git commit -m "adding python file"
[master (root-commit) 5aa97ae] adding python file
1 file changed, 1 insertion(+)
create mode 100644 hello_world.py
amogh@pop-os:~/Programming/NexTurn_Assignments/Module2/M2_git_assignment$ git remote add origin git@github.com
:Amogh1001/M2_git_assignment.git
```

Then, we'll switch branch to main branch and push it to the github repository

```
amogh@pop-os:~/Programming/NexTurn_Assignments/Module2/M2_git_assignment$ git branch -M main
amogh@pop-os:~/Programming/NexTurn_Assignments/Module2/M2_git_assignment$ git push -u origin main
Enumerating objects: 3, done.
Counting objects: 100% (3/3), done.
Writing objects: 100% (3/3), 248 bytes | 248.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
To github.com:Amogh1001/M2_git_assignment.git
 * [new branch]      main -> main
branch 'main' set up to track 'origin/main'.
```

Then, we'll create branch feature/update-readme, create README.md, and push it to feature branch of github repository.

```
amogh@pop-os:~/Programming/NexTurn_Assignments/Module2/M2_git_assignment$ git checkout -b feature/update-readme
Switched to a new branch 'feature/update-readme'
amogh@pop-os:~/Programming/NexTurn_Assignments/Module2/M2_git_assignment$ echo "# Example file to show git upload" > README.md
amogh@pop-os:~/Programming/NexTurn_Assignments/Module2/M2_git_assignment$ git add .
amogh@pop-os:~/Programming/NexTurn_Assignments/Module2/M2_git_assignment$ git commit -m "added README.md"
[feature/update-readme ddb2e8d] added README.md
1 file changed, 1 insertion(+)
create mode 100644 README.md
```

```

amogh@pop-os:~/Programming/NexTurn_Assignments/Module2/M2_git_assignment$ git push -u origin feature/update-readme
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), 322 bytes | 322.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
remote:
remote: Create a pull request for 'feature/update-readme' on GitHub by visiting:
remote:   https://github.com/Amogh1001/M2_git_assignment/pull/new/feature/update-readme
remote:
To github.com:Amogh1001/M2_git_assignment.git
 * [new branch]      feature/update-readme -> feature/update-readme
branch 'feature/update-readme' set up to track 'origin/feature/update-readme'.

```

Then, we'll merge the feature and main branches, both locally and remote.

```

amogh@pop-os:~/Programming/NexTurn_Assignments/Module2/M2_git_assignment$ git checkout main
Switched to branch 'main'
Your branch is up to date with 'origin/main'.
amogh@pop-os:~/Programming/NexTurn_Assignments/Module2/M2_git_assignment$ git merge feature/update-readme
Updating 0da90fe..ddb2e8d
Fast-forward
 README.md | 1 +
 1 file changed, 1 insertion(+)
 create mode 100644 README.md
amogh@pop-os:~/Programming/NexTurn_Assignments/Module2/M2_git_assignment$ git push origin main
Total 0 (delta 0), reused 0 (delta 0), pack-reused 0
To github.com:Amogh1001/M2_git_assignment.git
 0da90fe..ddb2e8d  main -> main

```

Then, we'll delete feature branch, both locally and remote.

```

amogh@pop-os:~/Programming/NexTurn_Assignments/Module2/M2_git_assignment$ git branch -d feature/update-readme
Deleted branch feature/update-readme (was ddb2e8d).
amogh@pop-os:~/Programming/NexTurn_Assignments/Module2/M2_git_assignment$ git push origin --delete feature/update-readme
To github.com:Amogh1001/M2_git_assignment.git
 - [deleted]      feature/update-readme
amogh@pop-os:~/Programming/NexTurn_Assignments/Module2/M2_git_assignment$

```

KEY QUESTIONS:

1. HOW WILL YOU SET UP THE PROJECT FOR VERSION CONTROL AND PUSH IT TO GITHUB?

```

git init
git add .
git commit -m "commit message"
git remote add origin <repo name>
git branch -M main
git push -u origin main

```

2. WHAT STEPS WILL YOU TAKE TO CREATE, PUSH AND MANAGE BRANCHES EFFECTIVELY?

`git checkout -b feature/update-readme`

`git add .`

`git commit -m "commit message"`

`git push -u origin feature/update-readme`

3. HOW WILL YOU ENSURE THE CHANGES IN THE BRANCH ARE MERGED INTO THE MAIN BRANCH?

`git checkout main`

`git merge feature/update-readme`

`git push origin main`

4. WHAT COMMANDS WILL YOU USE TO CLEAN UP THE UNUSED BRANCHES LOCALLY AND REMOTELY?

`git branch -d feature/update-readme`

`git push origin --delete feature/update-readme`