GIT   LAB ASSIGNMENT → 03

NAME   :   KEERTHIKA B
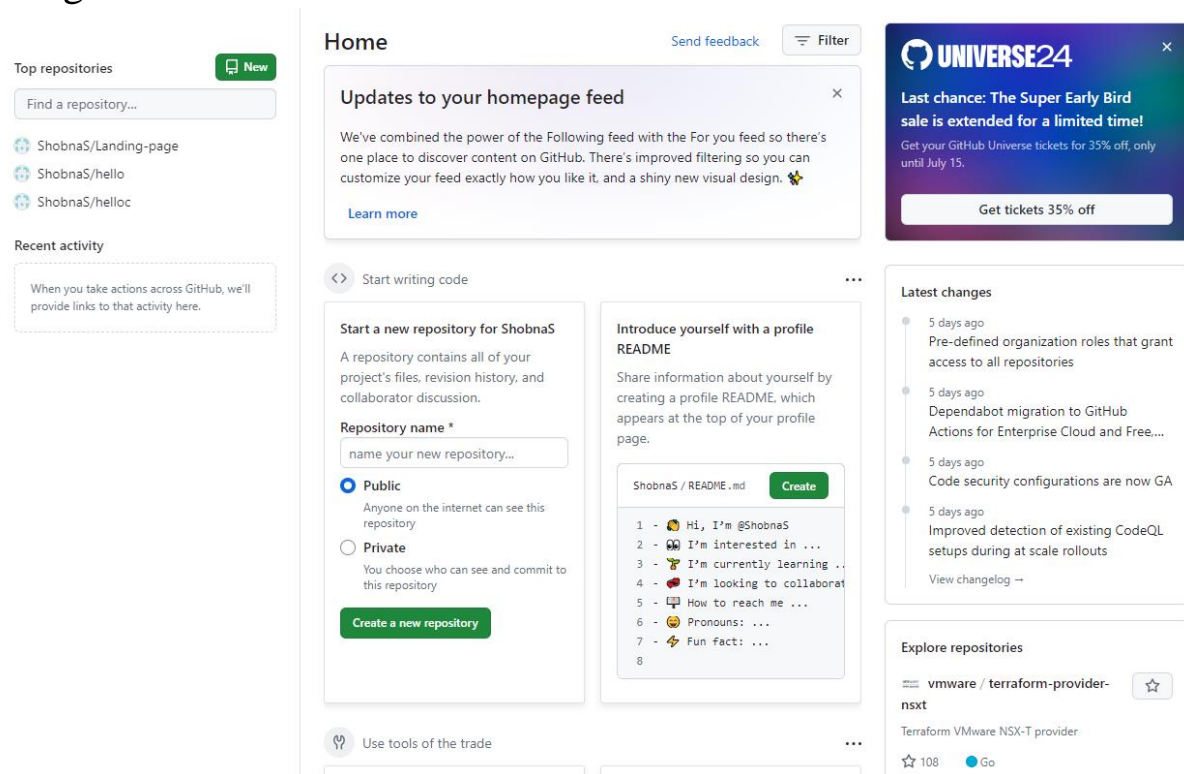
BRANCH   : B.E

DEPT   : COMPUTER SCIENCE AND ENGINEERING

YEAR   : IV - YEAR

COLLEGE : KSRIET

DATE   : 15.07.2024

1.First, one person in the group should create a public repository using their GitHub account.

2. This same person should then follow the instructions from GitHub to add a remote, and then push their repository. Do not forget the –u flag, as suggested by GitHub!

3. All of the other members of the group should then be added as collaborators, so they can commit to the repository also.
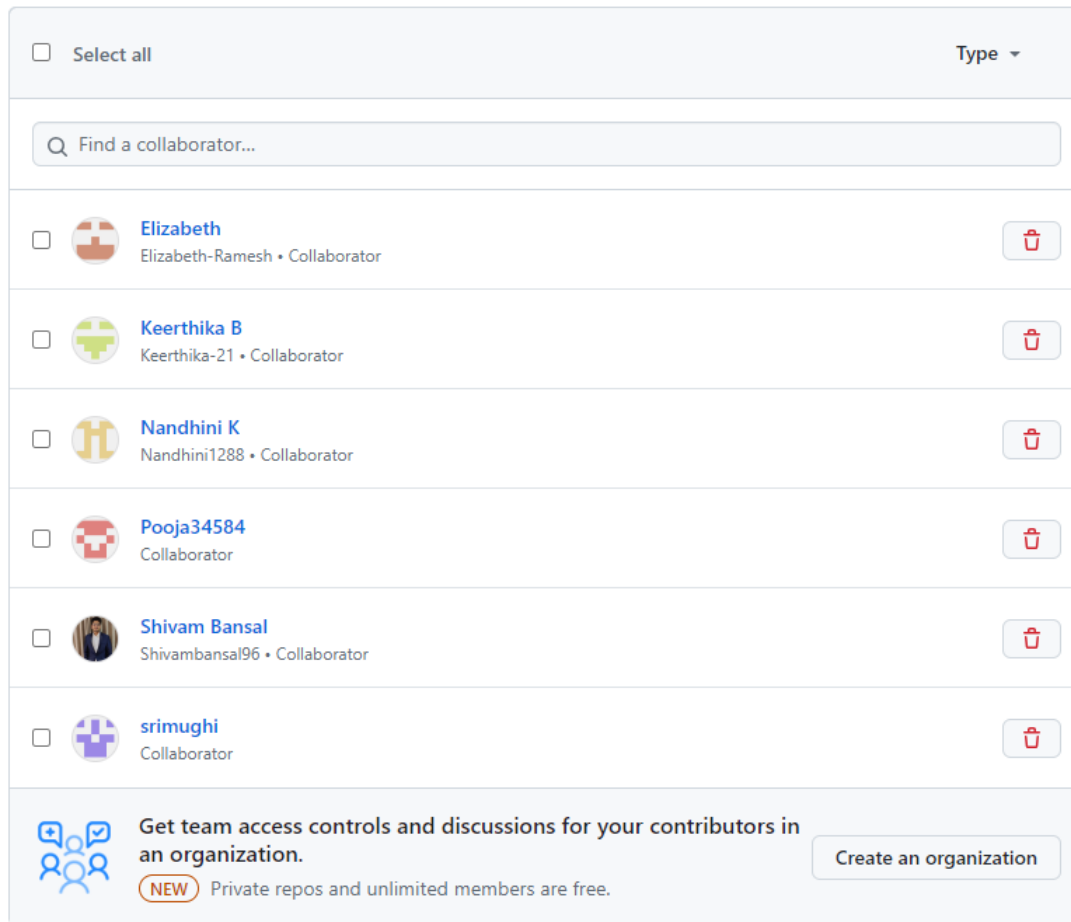
4. Next, everyone else in the group should clone the repository from GitHub. Verify that the context of the repository is what is expected.
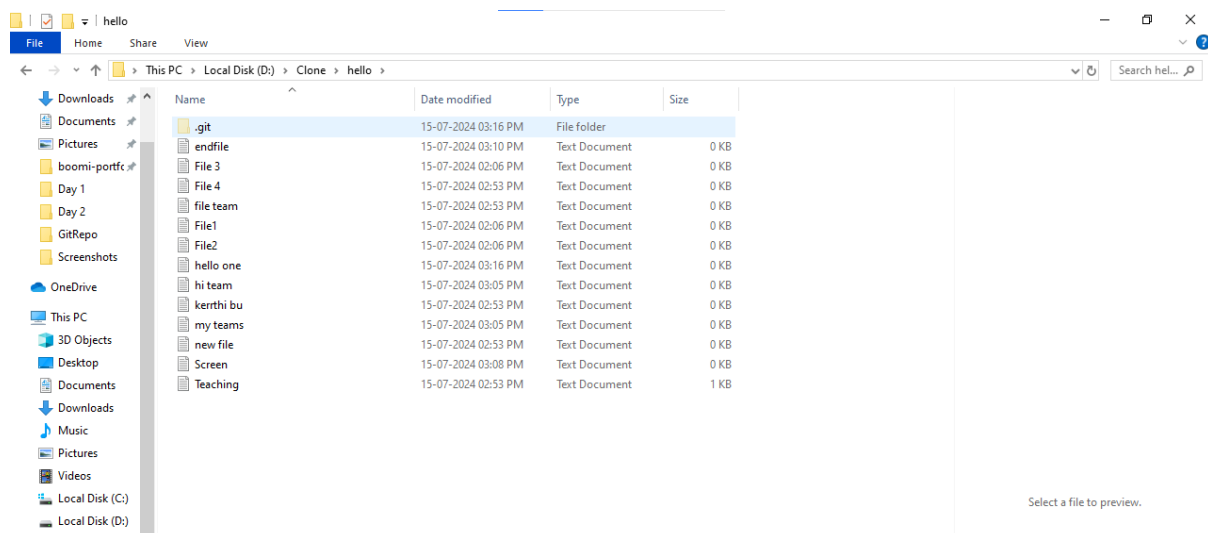
5. One of the group members who just cloned should now make a local commit, then push it. Everyone should verify that when they pull, that commit is added to their local repository (use git log to check for it)

```
C:\Users\home>D:

D:\>cd Clone

D:\Clone>cd hello

D:\Clone\hello>git add .

D:\Clone\hello>git commit -m"Long"
[master 7516c7f] Long

D:\Clone\hello>git push origin master
Enumerating objects: 9, done.
Counting objects: 100% (9/9), done.
Delta compression using up to 4 threads
Compressing objects: 100% (6/6), done.
Writing objects: 100% (6/6), 685 bytes | 342.00 KiB/s, done.
Total 6 (delta 3), reused 0 (delta 0), pack-reused 0 (from 0)
remote: Resolving deltas: 100% (3/3), completed with 1 local object.
To https://github.com/ShobnaS/hello
   57c59d9..7516c7f  master -> master

D:\Clone\hello>git pull origin master
remote: Enumerating objects: 9, done.
remote: Counting objects: 100% (9/9), done.
remote: Compressing objects: 100% (3/3), done.
remote: Total 6 (delta 3), reused 6 (delta 3), pack-reused 0
Unpacking objects: 100% (6/6), 608 bytes | 40.00 KiB/s, done.
From https://github.com/ShobnaS/hello
 * branch            master     -> FETCH_HEAD
   7516c7f..51ff4a1  master     -> origin/master
Updating 7516c7f..51ff4a1
Fast-forward
 hello one.txt | 0
 1 file changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 hello one.txt
```

6. Look at each other's git log output. Notice how the SHA-1 is the same for a given commit across every copy of the repository. Why is this important?

```
D:\Clone\hello>git log
commit 51ff4a1118e3db8ecd40c34bf177618eec6e26d7 (HEAD -> master, origin/master, origin/HEAD)
Merge: 20d436e 7516c7f
Author: Srimughi <ssrimughi@gmail.com>
Date:   Mon Jul 15 15:15:32 2024 +0530

    helooo

commit 20d436e1221bfb9d33728a1011c308b6832169d7
Merge: db968af 57c59d9
Author: Srimughi <ssrimughi@gmail.com>
Date:   Mon Jul 15 15:13:09 2024 +0530

    hello java

commit 7516c7f52738cf3f61b1820199e370d2cb7a7050
Merge: 8b572b9 57c59d9
Author: ShobnaSamukthaRaj <samukthasamuktha2@gmail.com>
Date:   Mon Jul 15 15:11:26 2024 +0530

    Long

commit 8b572b92d857c28e27fff53c684dd26e0f1491d3
Merge: 90b60ce 5ac50ca
Author: ShobnaSamukthaRaj <samukthasamuktha2@gmail.com>
Date:   Mon Jul 15 15:09:27 2024 +0530

    jump

commit db968af12fb74536eca30af925d922adb59d0597
Author: Srimughi <ssrimughi@gmail.com>
Date:   Mon Jul 15 15:08:59 2024 +0530

    hello java

commit 57c59d95e460744d14a9becc9a821d3a8c6625b6
Author: shobna <shobna016@gmail.com>
Date:   Mon Jul 15 15:08:44 2024 +0530

    newcomit

commit 5ac50caf08211a485a5b4a9af0bf38341d4aaa72
Author: shobna <shobna016@gmail.com>
Date:   Mon Jul 15 15:05:38 2024 +0530

    newcomit

commit 90b60ce8a88d00a3881694b161efb0532ecc97ce
Author: ShobnaSamukthaRaj <samukthasamuktha2@gmail.com>
Date:   Mon Jul 15 15:01:02 2024 +0530

    Hi

commit fdd24d1b9a75799179efd9511ca67ef39ba1ae32
Merge: 99764ae 9bf2e91
Author: pooja <poojashanmugam05@gmail.com>
Date:   Mon Jul 15 15:00:42 2024 +0530

    MyTeam Commit
```

7. Two members of the group should now make a commit locally, and race to push it. To keep things simple, be sure to edit different files. What happens to the runner-up?

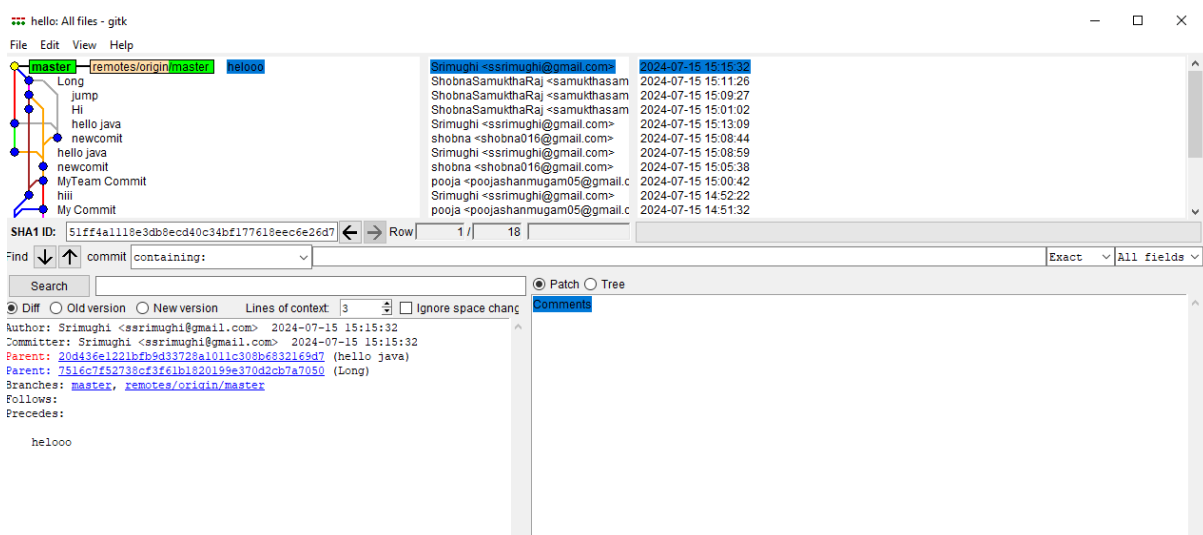| srimughi hiii sri		261857c · 2 minutes ago	32 Commits
File 3.txt	Hello		1 hour ago
File 4.txt	Hello1		1 hour ago
File1.txt	MyCommit-1		4 days ago
File2.txt	MyCommit-1		4 days ago
Screen.txt	jump		28 minutes ago
Teaching.txt	added		1 hour ago
elizabeth.txt	elizabeth		3 minutes ago
endfile.txt	newcomit		29 minutes ago
file team.txt	newcomit		48 minutes ago
hello one.txt	hello java		29 minutes ago
hi team.txt	MyTeam Commit		37 minutes ago
keerthika hiii.txt	merge		16 minutes ago

8. The runner-up should now pull. As a group, look at the output of the command. Additionally, look at the git log, and notice that there is a merge commit. You may also wish to view the DAG in gitk.

9. Repeat the last two steps a couple of times, to practice.

```
D:\MyGitLocalRepo\git>git add .

D:\MyGitLocalRepo\git>git commit -m"Hello"
[master 1e13039] Hello
 1 file changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 File 3.txt

D:\MyGitLocalRepo\git>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

D:\MyGitLocalRepo\git>git remote add origin https://github.com/ShobnaS/hello.git
error: remote origin already exists.

D:\MyGitLocalRepo\git>git push -u origin master
Enumerating objects: 3, done.
Counting objects: 100% (3/3), done.
Delta compression using up to 4 threads
Compressing objects: 100% (2/2), done.
Writing objects: 100% (2/2), 248 bytes | 248.00 KiB/s, done.
Total 2 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
To https://github.com/ShobnaS/hello.git
   1648de0..1e13039  master -> master
branch 'master' set up to track 'origin/master'.

D:\MyGitLocalRepo\git>git add .

D:\MyGitLocalRepo\git>git commit -m"Hello1"
On branch master
Your branch is up to date with 'origin/master'.

nothing to commit, working tree clean

D:\MyGitLocalRepo\git>git remote add origin https://github.com/ShobnaS/hello.git
error: remote origin already exists.

D:\MyGitLocalRepo\git>git push -u origin master
branch 'master' set up to track 'origin/master'.
Everything up-to-date

D:\MyGitLocalRepo\git>git remote add origin https://github.com/ShobnaS/hello.git
error: remote origin already exists.

D:\MyGitLocalRepo\git>git push -u origin master
branch 'master' set up to track 'origin/master'.
Everything up-to-date

D:\MyGitLocalRepo\git>git add .

D:\MyGitLocalRepo\git>git commit -m"Hello1"
[master 1020a19] Hello1
 1 file changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 File 4.txt

D:\MyGitLocalRepo\git>git remote add origin https://github.com/ShobnaS/hello.git
error: remote origin already exists.

D:\MyGitLocalRepo\git>git push -u origin master
Enumerating objects: 3, done.
Counting objects: 100% (3/3), done.
Delta compression using up to 4 threads
```