

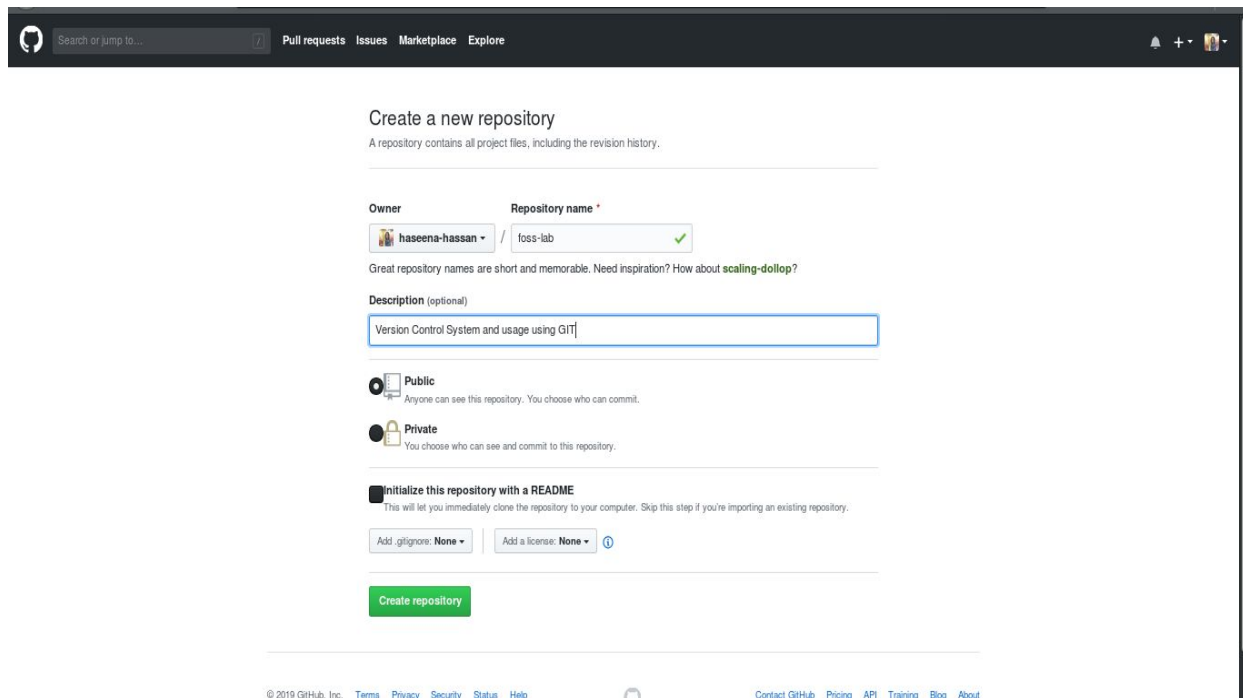
EXPT NO : 3

REPORT

DATE :22/02/2019

AIM : To setup Version Control System using Git

1. Create a new repository



The screenshot shows the GitHub 'Create a new repository' page. At the top, there is a navigation bar with the GitHub logo, a search bar, and links for 'Pull requests', 'Issues', 'Marketplace', and 'Explore'. The main heading is 'Create a new repository', followed by a subtext: 'A repository contains all project files, including the revision history.' Below this, there are two input fields: 'Owner' (set to 'haseena-hassan') and 'Repository name' (set to 'foss-lab' with a green checkmark). A note states: 'Great repository names are short and memorable. Need inspiration? How about [scaling-dollop](#)?' The 'Description (optional)' field contains the text 'Version Control System and usage using GIT'. There are two radio button options for visibility: 'Public' (selected) and 'Private'. Below these, there is a section 'Initialize this repository with a README' with a subtext: 'This will let you immediately clone the repository to your computer. Skip this step if you're importing an existing repository.' At the bottom of this section, there are two dropdown menus: 'Add .gitignore: None' and 'Add a license: None'. A green 'Create repository' button is at the bottom. The footer contains copyright information, links to 'Terms', 'Privacy', 'Security', 'Status', 'Help', and 'Contact GitHub', 'Pricing', 'API', 'Training', 'Blog', 'About'.

Search or jump to... Pull requests Issues Marketplace Explore

Create a new repository

A repository contains all project files, including the revision history.

Owner: haseena-hassan Repository name: foss-lab

Great repository names are short and memorable. Need inspiration? How about [scaling-dollop](#)?

Description (optional): Version Control System and usage using GIT

☒ Public
Anyone can see this repository. You choose who can commit.

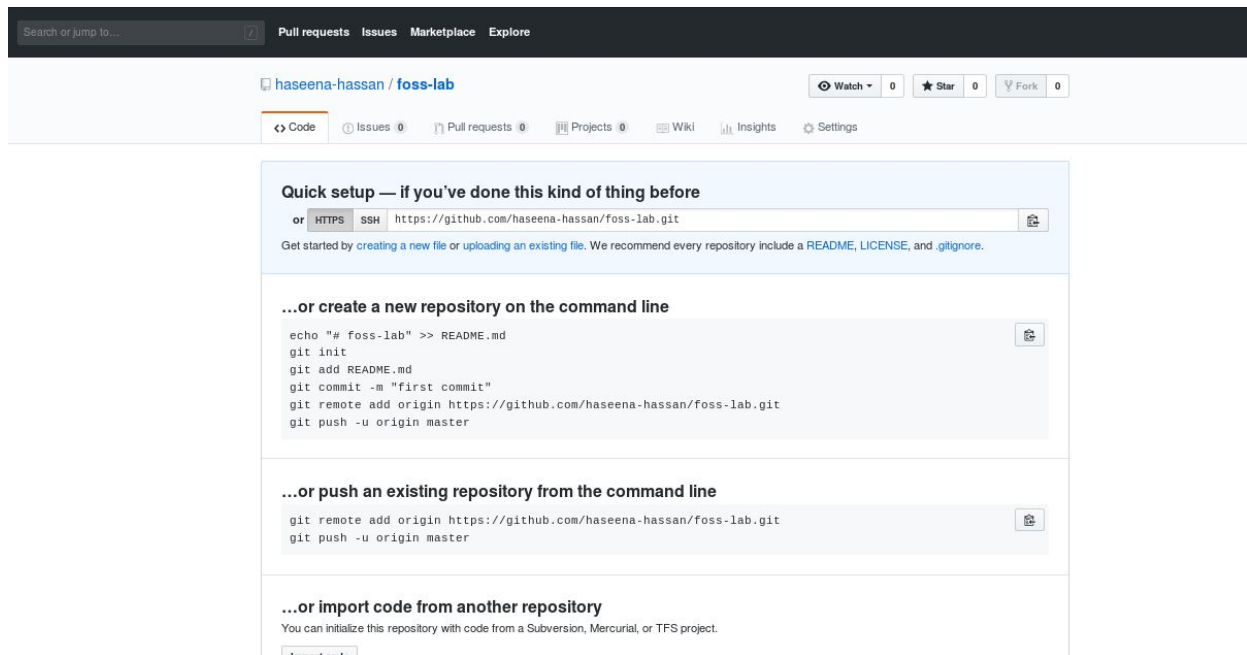
☐ Private
You choose who can see and commit to this repository.

☒ Initialize this repository with a README
This will let you immediately clone the repository to your computer. Skip this step if you're importing an existing repository.

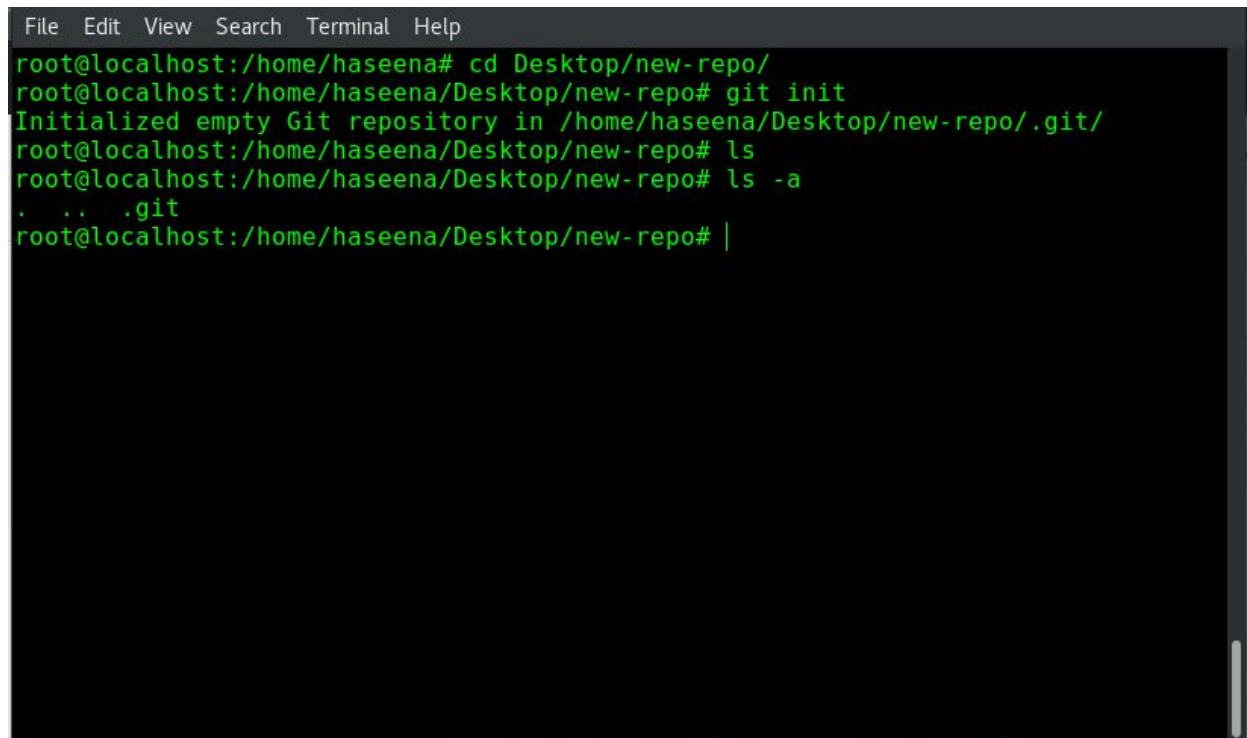
Add .gitignore: None Add a license: None

Create repository

© 2019 GitHub, Inc. Terms Privacy Security Status Help Contact GitHub Pricing API Training Blog About



2. Checking out a repository



```
File Edit View Search Terminal Help
root@localhost:/home/haseena/Desktop/new-repo# git clone https://github.com/hase
ena-hassan/foss-lab.git
Cloning into 'foss-lab'...
warning: You appear to have cloned an empty repository.
root@localhost:/home/haseena/Desktop/new-repo# ls -a
.  ..  foss-lab  .git
root@localhost:/home/haseena/Desktop/new-repo# |
```

3. Adding contents to the repository

```
File Edit View Search Terminal Help
root@localhost:/home/haseena/Desktop/new-repo# echo "foss lab tutorials on version control using GIT" > README.md
root@localhost:/home/haseena/Desktop/new-repo# cat README.md
foss lab tutorials on version control using GIT
root@localhost:/home/haseena/Desktop/new-repo# git add README.md
root@localhost:/home/haseena/Desktop/new-repo# git status
On branch master

Initial commit

Changes to be committed:
  (use "git rm --cached <file>..." to unstage)

    new file:   README.md
root@localhost:/home/haseena/Desktop/new-repo# |
```

4. Committing data to a repository

```

File Edit View Search Terminal Help
root@localhost:/home/haseena/Desktop/new-repo# git config --global user.email "haseena2199@gmail.com"
root@localhost:/home/haseena/Desktop/new-repo# git config --global user.name "haseena-hassan"
root@localhost:/home/haseena/Desktop/new-repo# git status
On branch master

Initial commit

Changes to be committed:
  (use "git rm --cached <file>..." to unstage)

        new file:   README.md

root@localhost:/home/haseena/Desktop/new-repo# |

```

```

root@localhost:/home/haseena/Desktop/new-repo# git commit -m "adding README.md"
[master (root-commit) 8a2d1c6] adding README.md
 1 file changed, 1 insertion(+)
 create mode 100644 README.md
root@localhost:/home/haseena/Desktop/new-repo# git status
On branch master
nothing to commit, working tree clean
root@localhost:/home/haseena/Desktop/new-repo# |

```

5. Updating the local copy

```

File Edit View Search Terminal Help
root@localhost:/home/haseena/Desktop/new-repo# git remote add origin https://github.com/haseena-hassan/foss-lab.git
root@localhost:/home/haseena/Desktop/new-repo# git push -u origin master
Username for 'https://github.com': haseena-hassan
Password for 'https://haseena-hassan@github.com':
Counting objects: 3, done.
Writing objects: 100% (3/3), 267 bytes | 0 bytes/s, done.
Total 3 (delta 0), reused 0 (delta 0)
To https://github.com/haseena-hassan/foss-lab.git
 * [new branch]      master -> master
Branch master set up to track remote branch master from origin.
root@localhost:/home/haseena/Desktop/new-repo# git status
On branch master
Your branch is up-to-date with 'origin/master'.
nothing to commit, working tree clean
root@localhost:/home/haseena/Desktop/new-repo# |

```

6. Comparing different revisions

```
haseena@localhost:~/Desktop/new-repo$ git diff master new-branch
diff --git a/diff_test.txt b/diff_test.txt
commit 957fbc92b123030c389bf8b4b874522bdf2db72c "add feature"
commit ce489262a1ee34340440e55a0b99ea6918e19e7a "rename some classes"
commit 6b539f280d8b0ec4874671bae9c6bed80b788006 "refactor some code for feature"
commit 646e7863348a427e1ed9163a9a96fa759112f102 "add some copy to body"
index 6b0c6cf..b37e70a 100644

--- a/diff_test.txt
+++ b/diff_test.txt
@@ -1 +1 @@
haseena@localhost:~/Desktop/new-repo$
```

7. Revert

```
haseena@localhost:~/Desktop/new-repo$ git revert HEAD
[master b9cd081] Revert "prepend content to demo file"
1 file changed, 1 deletion(-)
haseena@localhost:~/Desktop/new-repo$ git log
1061e79 Revert "prepend content to demo file"
86bb32e prepend content to demo file
3602d88 add new content to demo file
299b15f initial commit
haseena@localhost:~/Desktop/new-repo$
```

8. Conflict and a conflict resolution

```
root@localhost:/home/haseena/Desktop/new-repo# git merge branch2/master
error: Your local changes to the following files would be overwritten by merge:
    build/build.number
Please, commit your changes or stash them before you can merge.
Aborting
```

```
root@localhost:/home/haseena/Desktop/new-repo# git merge upstream/master
Auto-merging administrator/components/com_kunenaimporter/CHANGELOG.php
CONFLICT (content): Merge conflict in administrator/components/com_kunenaimporter/CHANGELOG.php
Automatic merge failed; fix conflicts and then commit the result.
root@localhost:/home/haseena/Desktop/new-repo#
```

```
root@localhost:/home/haseena/Desktop/new-repo# git merge branch2/master
HEAD is now at 030223c # [#21] Little issue with parent on agora category import
root@localhost:/home/haseena/Desktop/new-repo# |
```

7

Pull requests

Issues

Marketplace

Explore

haseena-hassan / foss-lab

Watch

0

Star

0

Fork

0

<> Code

Issues 0

Pull requests 0

Projects 0

Wiki

Insights

Settings

created features.txt #1

Edit

Merged

haseena-hassan merged 1 commit into master from new-branch a minute ago


Conversation 0

Commits 1

Checks 0

Files changed 1

+5-0



haseena-hassan commented 5 minutes ago


Owner + 👤 ...

No description provided.

created features.txt

4fff5c7

haseena-hassan merged commit 4fff5c7 into master a minute ago



Pull request successfully merged and closed

You're all set—the new-branch branch can be safely deleted.

Delete branch

Write

Preview

AA B i “ > ☁ ☰ ☷ ☹ @ 📎 ↩

Leave a comment

Reviewers

No reviews

Assignees

No one—assign yourself

Labels

None yet

Projects

None yet

Milestone

No milestone

Notifications

Unsubscribe

9. Branching


```

File Edit View Search Terminal Help
root@localhost:/home/haseena/Desktop/new-repo# nano features.txt
root@localhost:/home/haseena/Desktop/new-repo# git add .
root@localhost:/home/haseena/Desktop/new-repo# git checkout -b new-branch
A       features.txt
Switched to a new branch 'new-branch'
root@localhost:/home/haseena/Desktop/new-repo# git commit -m "created features.txt"
[new-branch 4fff5c7] created features.txt
 1 file changed, 5 insertions(+)
 create mode 100644 features.txt
root@localhost:/home/haseena/Desktop/new-repo# git push origin new-branch
Username for 'https://github.com': haseena-hassan
Password for 'https://haseena-hassan@github.com':
Counting objects: 3, done.
Delta compression using up to 8 threads.
Compressing objects: 100% (3/3), done.
Writing objects: 100% (3/3), 379 bytes | 0 bytes/s, done.
Total 3 (delta 0), reused 0 (delta 0)
remote:
remote: Create a pull request for 'new-branch' on GitHub by visiting:
remote:   https://github.com/haseena-hassan/foss-lab/pull/new/new-branch
remote:
To https://github.com/haseena-hassan/foss-lab.git
 * [new branch]      new-branch -> new-branch
root@localhost:/home/haseena/Desktop/new-repo# |

```

```

File Edit View Search Terminal Help
root@localhost:/home/haseena/Desktop/new-repo# git checkout master
Switched to branch 'master'
Your branch is up-to-date with 'origin/master'.
root@localhost:/home/haseena/Desktop/new-repo# git merge --no-ff new-branch
Merge made by the 'recursive' strategy.
 features.txt | 5 +++++
 1 file changed, 5 insertions(+)
 create mode 100644 features.txt
root@localhost:/home/haseena/Desktop/new-repo# git push origin master
Username for 'https://github.com': haseena-hassan
Password for 'https://haseena-hassan@github.com':
Counting objects: 1, done.
Writing objects: 100% (1/1), 224 bytes | 0 bytes/s, done.
Total 1 (delta 0), reused 0 (delta 0)
To https://github.com/haseena-hassan/foss-lab.git
 8a2d1c6..6bcc5c4 master -> master
root@localhost:/home/haseena/Desktop/new-repo#
root@localhost:/home/haseena/Desktop/new-repo# |

```

CONCLUSION

Understood the basic concepts of Version control system and familiarized the usage of git using github and command-line . Also implemented a first git repository in github and made further related operations on it.

