Module 2: Version Control with Git

Assignment - 1 Solution

edureka!



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Problem Statement

Three Developers are working in Aperture Technology co. Their company wants a better Source Code Management System because the earlier tool had the tendency to save redundant code. Multiple Developers working simultaneously on the same block of code also caused problems. You are Mike, and your manager has given you the task of moving the company's code base to git and Github.

Action Items

- Create a local git repository and move the entire code base to it
- Create a new branch for a new feature you want to add to the application
- Merge back the created branch with the master branch
- Create a remote repository
- Push the local repository to company's remote repository

Link to download the code base

Solution

1. Move to your Source Code directory and initialize a git repo in that folder

root@edureka:/home/edureka/Documents/sourceCode# ls
css fonts img index.html

Syntax: git init

root@edureka:/home/edureka/Documents/sourceCode# git init Initialized empty Git repository in /home/edureka/Documents/sourceCode/.git/ 2. Add all the files in the repository to the staging area

Syntax: git add.

3. Now commit these files to the local repository

Syntax: git commit

```
root@edureka:/home/edureka/Documents/sourceCode# git commit
[master (root-commit) 93a5224] All files added to the local repo
9 files changed, 198 insertions(+)
create mode 100644 css/site.css
create mode 100644 fonts/segoeuil.ttf
create mode 100644 img/cloneWhite.svg
create mode 100644 img/deployWhite.svg
create mode 100644 img/lightbulbWhite.svg
create mode 100644 img/stackWhite.svg
create mode 100644 img/successCloudNew.svg
create mode 100644 img/tweetThis.svg
create mode 100644 index.html
```

```
root@edureka:/home/edureka/Documents/sourceCode# git log
commit 93a522451aa29c3a5695c3ba6d74ba471c4c2c84
Author: edureka <devops.content@edureka.co>
Date: Wed May 30 13:25:15 2018 +0530
All files added to the local repo
```

4. Create a new feature branch and switch to it

Syntax: git branch branchName git checkout branchName

root@edureka:/home/edureka/Documents/sourceCode# git branch new-feature1

```
root@edureka:/home/edureka/Documents/sourceCode# git branch
list
* master
new-feature1
```

root@edureka:/home/edureka/Documents/sourceCode# git checkout new-feature1

5. Make the required changes to the source files and then do a git diff to check all the changes

Syntax: git diff

```
root@edureka:/home/edureka/Documents/sourceCode# git diff
diff --git a/index.html b/index.html
index 0d303bb..d207dad 100644
--- a/index.html
+++ b/index.html
@@ -2,7 +2,7 @@
<html>

<head>
- <title>HTML Application</title>
+ <title>My HTML Application</title>
<head>
</head>
</head></head>
```

6. Now add the changed files to the staging area

```
Syntax: git add fileName OR git add .
```

root@edureka:/home/edureka/Documents/sourceCode# git add index.html

7. Commit the changes

Syntax: git commit

```
root@edureka:/home/edureka/Documents/sourceCode# git commit
[new-feature1 f8f67fd] Added new feature1
    file changed, 1 insertion(+), 1 deletion(-)
```

8. Now switch back to master and merge the feature branch back into the master

Syntax: git merge branchName

```
root@edureka:/home/edureka/Documents/sourceCode# git checkout master
Switched to branch 'master'
root@edureka:/home/edureka/Documents/sourceCode# git merge new-feature1
Updating 93a5224..f8f67fd
Fast-forward
index.html | 2 +-
1 file changed, 1 insertion(+), 1 deletion(-)
```

- 9. Now, create a remote repository on your Github account.
- 10. Add the remote repository to your local repo

Syntax: git remote add origin repoURL

```
root@edureka:/home/edureka/Documents/sourceCode# git remote add origin https://github.com/edureka-devops/gitCaseStudy.git
root@edureka:/home/edureka/Documents/sourceCode# git log
commit f8f67fd753ba22e232788f5f2bd0276f0a309a59
Author: edureka <devops.content@edureka.co>
Date: Wed May 30 14:26:59 2018 +0530

Added new feature1

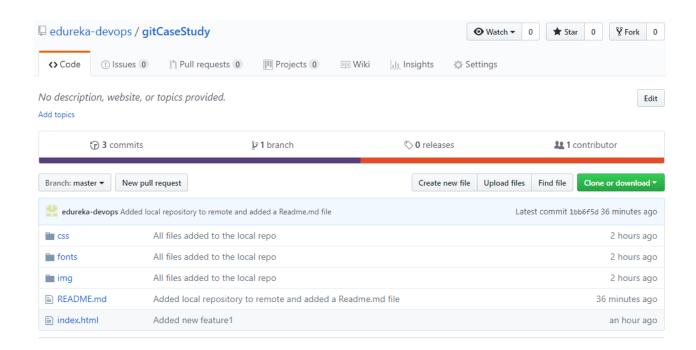
commit 93a522451aa29c3a5695c3ba6d74ba471c4c2c84
Author: edureka <devops.content@edureka.co>
Date: Wed May 30 13:25:15 2018 +0530

All files added to the local repo
```

11. Push the local repository onto the remote repository

Syntax: git push -u origin master

```
root@edureka:/home/edureka/Documents/sourceCode# git push -u origin master Username for 'https://github.com': edureka-devops Password for 'https://edureka-devops@github.com': Counting objects: 17, done.
Compressing objects: 100% (15/15), done.
Writing objects: 100% (17/17), 460.66 KiB | 0 bytes/s, done.
Total 17 (delta 2), reused 0 (delta 0)
remote: Resolving deltas: 100% (2/2), done.
To https://github.com/edureka-devops/gitCaseStudy.git
 * [new branch] master -> master
Branch master set up to track remote branch master from origin.
```



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