Edureka Assignments
Topic: Version Control with Git

Action Items

=> Create a local git repository and move the entire code base to it

Created local git repository

```
nath@nath-N53SV:~/edureka$ mkdir sampleproject
nath@nath-N53SV:~/edureka$ cd sampleproject/
nath@nath-N53SV:~/edureka/sampleproject$ 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/nath/edureka/sampleproject/.git/
nath@nath-N53SV:~/edureka/sampleproject$ git branch -m main
nath@nath-N53SV:~/edureka/sampleproject$ ls -la
total 12
drwxrwxr-x 3 nath nath 4096 Oct 22 18:21 .
drwxrwxr-x 3 nath nath 4096 Oct 22 18:21 ..
drwxrwxr-x 7 nath nath 4096 Oct 22 18:21 .git
```

Moved code base files to local working directory

```
nath@nath-N53SV:~/edureka/sampleproject$ scp -r ranganath@192.168.1.194:/Users/ranganath/Downloads/sample-project/* .
The authenticity of host '192.168.1.194 (192.168.1.194)' can't be established.
ED25519 key fingerprint is SHA256:4zMkeWgtwRH3qvXECBbYuYlPXnFf7ap7UUXTDrt+cBk.
This host key is known by the following other names/addresses:
    ~/.ssh/known_hosts:4: [hashed name]
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added '192.168.1.194' (ED25519) to the list of known hosts.
(ranganath@192.168.1.194) Password:
site.css                                       100% 3036   110.5KB/s   00:00
segoeuil.ttf                                   100%  789KB   7.3MB/s   00:00
deployWhite.svg                                100%  328   142.1KB/s   00:00
tweetThis.svg                                  100% 1074   413.2KB/s   00:00
stackWhite.svg                                 100%  509   203.3KB/s   00:00
lightbulbWhite.svg                             100% 1620   627.7KB/s   00:00
successCloudNew.svg                            100% 4237     1.5MB/s   00:00
cloneWhite.svg                                 100%  366   164.6KB/s   00:00
index.html                                     100% 2866     1.0MB/s   00:00
nath@nath-N53SV:~/edureka/sampleproject$ 
```

Staged all file in the working directory

```
nath@nath-N53SV:~/edureka/sampleproject$ git status
On branch main

No commits yet

Untracked files:
  (use "git add <file>..." to include in what will be committed)
        css/
        fonts/
        img/
        index.html

nothing added to commit but untracked files present (use "git add" to track)
nath@nath-N53SV:~/edureka/sampleproject$ git add -A
nath@nath-N53SV:~/edureka/sampleproject$ git status
On branch main

No commits yet

Changes to be committed:
  (use "git rm --cached <file>..." to unstage)
        new file:   css/site.css
        new file:   fonts/segoeuil.ttf
        new file:   img/cloneWhite.svg
        new file:   img/deployWhite.svg
        new file:   img/lightbulbWhite.svg
        new file:   img/stackWhite.svg
        new file:   img/successCloudNew.svg
        new file:   img/tweetThis.svg
        new file:   index.html

nath@nath-N53SV:~/edureka/sampleproject$
```

```
nath@nath-N53SV:~/edureka/sampleproject$ git commit -am "Commit the initial code base given f
or the project"
[main (root-commit) ccec282] Commit the initial code base given for the project
 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
nath@nath-N53SV:~/edureka/sampleproject$ git status
On branch main
nothing to commit, working tree clean
nath@nath-N53SV:~/edureka/sampleproject$
```

=> Create a new branch for a new feature you want to add to the application

Created new branch and switched to new branch from main

```
nath@nath-N53SV:~/edureka/sampleproject$ git branch newfeature
nath@nath-N53SV:~/edureka/sampleproject$ git checkout newfeature
Switched to branch 'newfeature'
nath@nath-N53SV:~/edureka/sampleproject$ git status
On branch newfeature
nothing to commit, working tree clean
nath@nath-N53SV:~/edureka/sampleproject$ ls
css  fonts  img  index.html
```

Working on new features and committed new feature changes to the branch

```
nath@nath-N53SV:~/edureka/sampleproject$ mkdir features
nath@nath-N53SV:~/edureka/sampleproject$ cd features
nath@nath-N53SV:~/edureka/sampleproject/features$ touch item1.css item2.css item3.css
nath@nath-N53SV:~/edureka/sampleproject/features$ echo "Cascade display changes" > item1.css
nath@nath-N53SV:~/edureka/sampleproject/features$ echo "Frames styles" > item2.css
nath@nath-N53SV:~/edureka/sampleproject/features$ echo "Grid and Menu selections" > item3.css

nath@nath-N53SV:~/edureka/sampleproject/features$ git add -A
nath@nath-N53SV:~/edureka/sampleproject/features$ git commit -am "New feature are now complet
ed"
[newfeature b04335f] New feature are now completed
 3 files changed, 3 insertions(+)
 create mode 100644 features/item1.css
 create mode 100644 features/item2.css
 create mode 100644 features/item3.css
nath@nath-N53SV:~/edureka/sampleproject/features$ 
```

Listed all new file in the newfeature branch

```
nath@nath-N53SV:~/edureka/sampleproject/features$ ls -la
total 20
drwxrwxr-x 2 nath nath 4096 Oct 22 18:56 .
drwxrwxr-x 7 nath nath 4096 Oct 22 18:56 ..
-rw-rw-r-- 1 nath nath   24 Oct 22 18:58 item1.css
-rw-rw-r-- 1 nath nath   14 Oct 22 18:58 item2.css
-rw-rw-r-- 1 nath nath   25 Oct 22 18:59 item3.css
nath@nath-N53SV:~/edureka/sampleproject/features$ cd ..
nath@nath-N53SV:~/edureka/sampleproject$ ls -l
total 20
drwxr-xr-x 2 nath nath 4096 Oct 22 18:26 css
drwxrwxr-x 2 nath nath 4096 Oct 22 18:56 features
drwxr-xr-x 2 nath nath 4096 Oct 22 18:26 fonts
drwxr-xr-x 2 nath nath 4096 Oct 22 18:26 img
-rw-r--r-- 1 nath nath 2866 Oct 22 18:26 index.html
nath@nath-N53SV:~/edureka/sampleproject$ 
```

=> Merge back the created branch with the master branch

Switched back to main branch and merged new feature changes into main
branch and now new feature files and folders are seen.

```
nath@nath-N53SV:~/edureka/sampleproject$ git checkout main
Switched to branch 'main'
nath@nath-N53SV:~/edureka/sampleproject$ ls
css  fonts  img  index.html
nath@nath-N53SV:~/edureka/sampleproject$ git merge newfeature
Updating ccec282..b04335f
Fast-forward
 features/item1.css | 1 +
 features/item2.css | 1 +
 features/item3.css | 1 +
 3 files changed, 3 insertions(+)
 create mode 100644 features/item1.css
 create mode 100644 features/item2.css
 create mode 100644 features/item3.css
nath@nath-N53SV:~/edureka/sampleproject$ ls
css  features  fonts  img  index.html
nath@nath-N53SV:~/edureka/sampleproject$ cd features/
nath@nath-N53SV:~/edureka/sampleproject/features$ ls
item1.css  item2.css  item3.css
nath@nath-N53SV:~/edureka/sampleproject/features$ 
```

=> Create a remote repository

Create a new repository

A repository contains all project files, including the revision history. Already have a project repository elsewhere? **Import a repository.**

Owner *　　　　**Repository name** *

[🧑 dubbaka ▾] / [sampleproject　　　　　✓]

Great repository names are short and memorable. Need inspiration? How about **miniature-garbanzo**?

Description (optional)

[Sample Project Files]

🔵 📖 **Public**
　　　Anyone on the internet can see this repository. You choose who can commit.

⚪ 🔒 **Private**
　　　You choose who can see and commit to this repository.

Initialize this repository with:
Skip this step if you're importing an existing repository.

☐ **Add a README file**
　　This is where you can write a long description for your project. Learn more.

Add .gitignore
Choose which files not to track from a list of templates. Learn more.

[.gitignore template: None ▾]

Choose a license
A license tells others what they can and can't do with your code. Learn more.

[License: None ▾]

ⓘ You are creating a public repository in your personal account.

[**Create repository**]

linked remote repository to local repo, Now it's ready to push the changes

```
nath@nath-N53SV:~/edureka/sampleproject$ git status
On branch main
nothing to commit, working tree clean
nath@nath-N53SV:~/edureka/sampleproject$ git remote add origin https://github.com/dubbaka/sam
pleproject.git
nath@nath-N53SV:~/edureka/sampleproject$ git remote -v
origin   https://github.com/dubbaka/sampleproject.git (fetch)
origin   https://github.com/dubbaka/sampleproject.git (push)
```

=> Push the local repository to company's remote repository.

```
nath@nath-N53SV:~/edureka/sampleproject$ git push -u origin main
Enumerating objects: 20, done.
Counting objects: 100% (20/20), done.
Delta compression using up to 8 threads
Compressing objects: 100% (15/15), done.
Writing objects: 100% (20/20), 460.88 KiB | 7.55 MiB/s, done.
Total 20 (delta 1), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (1/1), done.
To https://github.com/dubbaka/sampleproject.git
 * [new branch]      main -> main
Branch 'main' set up to track remote branch 'main' from 'origin'.
nath@nath-N53SV:~/edureka/sampleproject$ git status
On branch main
Your branch is up to date with 'origin/main'.

nothing to commit, working tree clean
nath@nath-N53SV:~/edureka/sampleproject$ 
```

Now the remote repository show all the changes with new features

End of this Assignment