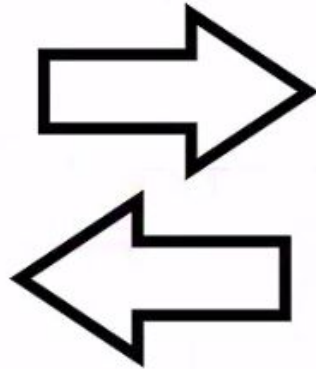


Part 5 - CLONE, PUSH CHANGES TO GITHUB

GitHub



Local



STEPS TO CLONE FROM GITHUB -

STEP 1 - Make sure git config settings are configured

- Make sure that Local Machine is already configured with git config user.name and user.email, failure to do this step will cause the error messages while commit.

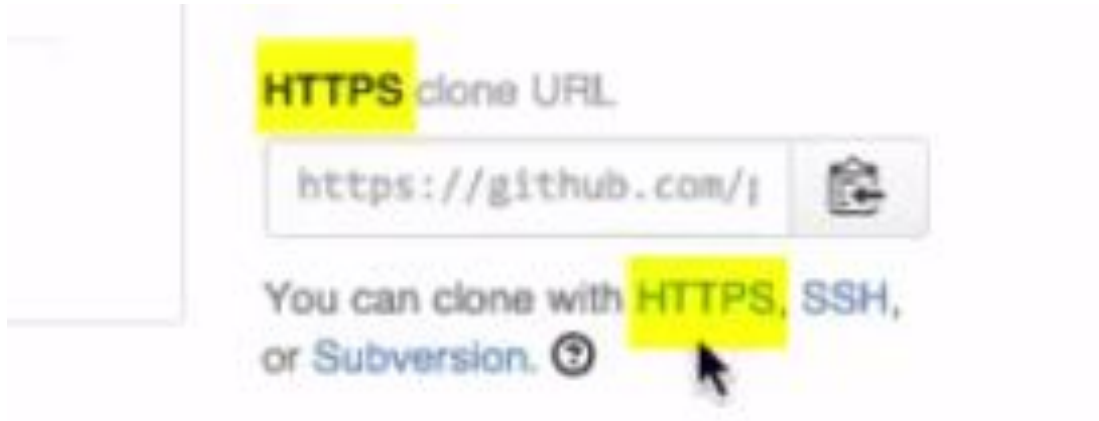
Example :

- To verify the git config settings a global level

```
$ git config --global --list
```

STEP 2 - Get the https link of Repository from github

- Make sure that https is selected before you copy the clone link into clipboard



STEP 3 - Execute the git clone command

- Make sure that you are in Projects folder on Local folder, then execute below command

git clone URL

Note : here URL refers to Repository Clone Copy link from github

Example :

```
projects $ git clone https://github.com/prezlincoln/github-demo.git
Cloning into 'github-demo'...
remote: Counting objects: 3, done.
remote: Compressing objects: 100% (2/2), done.
remote: Total 3 (delta 0), reused 0 (delta 0)
Unpacking objects: 100% (3/3), done.
Checking connectivity... done.
projects $ █
```

Step 4 : Verify the Cloned Repository on Local Machine

```
projects $ ls
github-demo/
projects $ cd github-demo/
(master) github-demo $ ls
README.md
(master) github-demo $ git status
On branch master
Your branch is up-to-date with 'origin/master'.

nothing to commit, working directory clean
(master) github-demo $
```

Note - Once the clone is completed successfully, the git clone command will establish a relation with remote repository on github with reference name, called as ORIGIN

Now start working on Local Machine -

CASE STUDY :

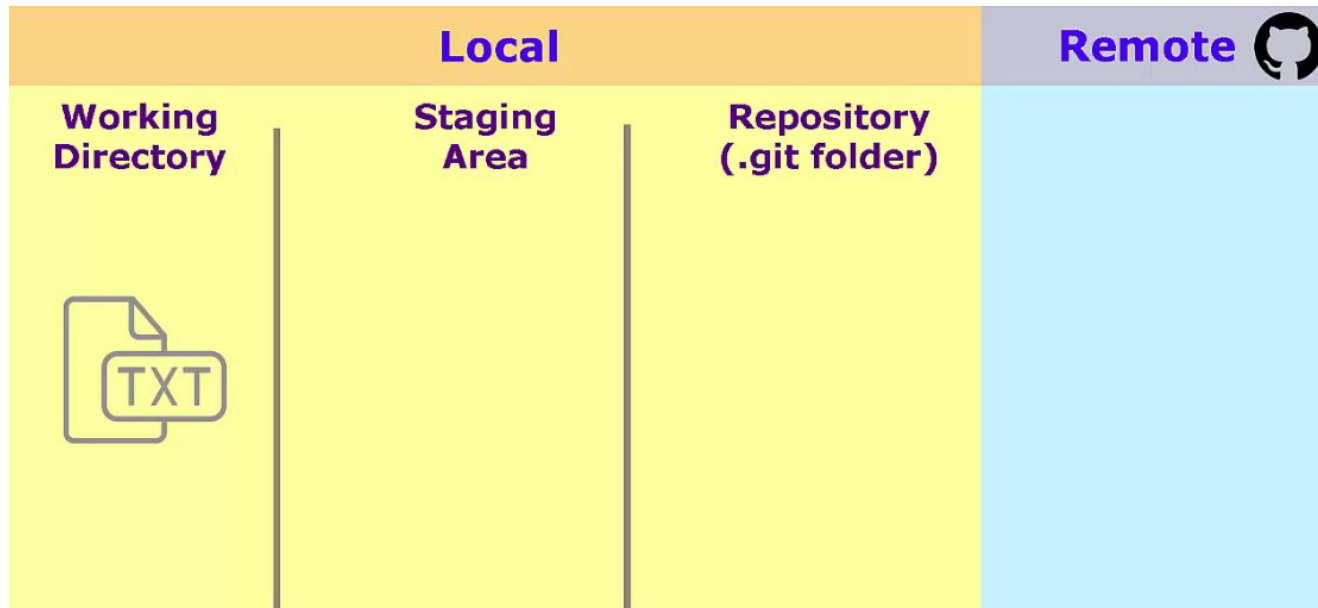
```
(master) github-demo $ echo "Test Git Quick Start demo" >> start.txt
(master) github-demo $ ls
README.md  start.txt
(master) github-demo $ cat start.txt
Test Git Quick Start demo
(master) github-demo $ git status
On branch master
Your branch is up-to-date with 'origin/master'.

Untracked files:
  (use "git add <file>..." to include in what will be committed)

    start.txt

nothing added to commit but untracked files present (use "git add" to t
(master) github-demo $
```

- Currently, file start.txt is untracked and it is working directory only



Now, let us add a file `start.txt` to staging area -

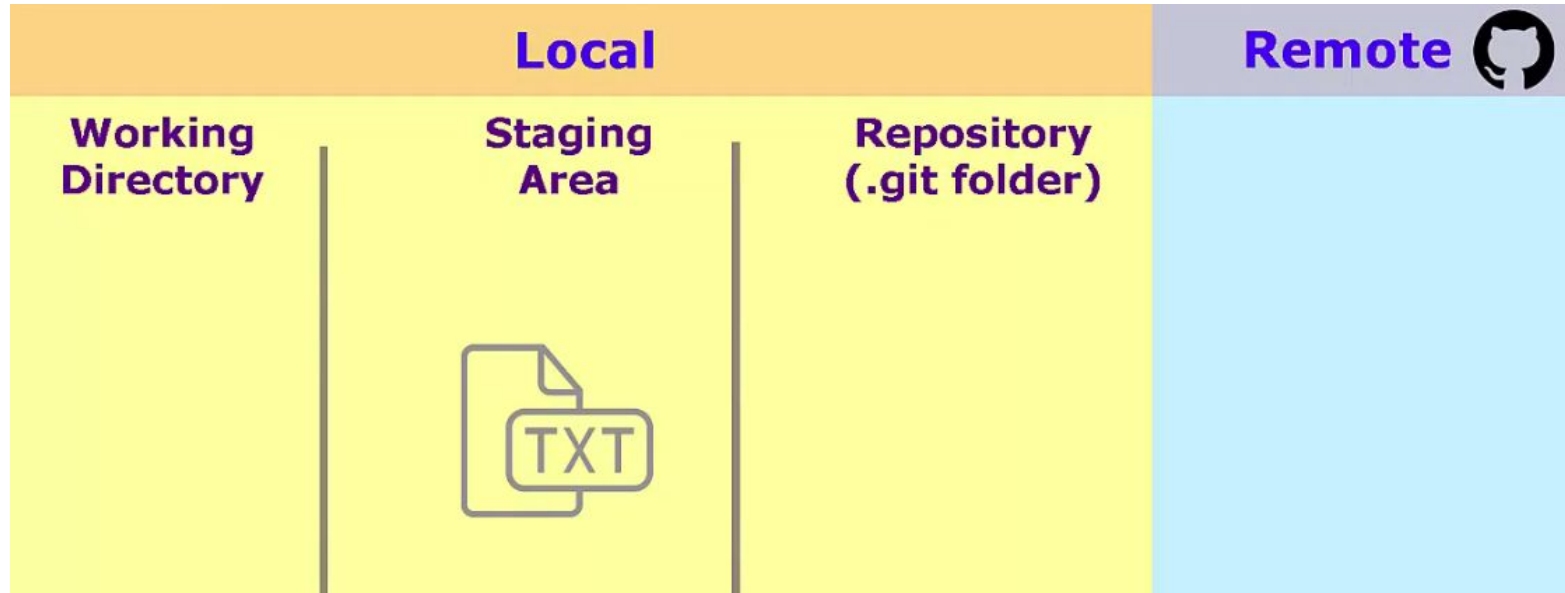
```
(master) github-demo $ git add start.txt
(master) github-demo $ git status
On branch master
Your branch is up-to-date with 'origin/master'.

Changes to be committed:
  (use "git reset HEAD <file>..." to unstage)

    new file:   start.txt

(master) github-demo $ █
```


Now, the file start.txt is in staging area

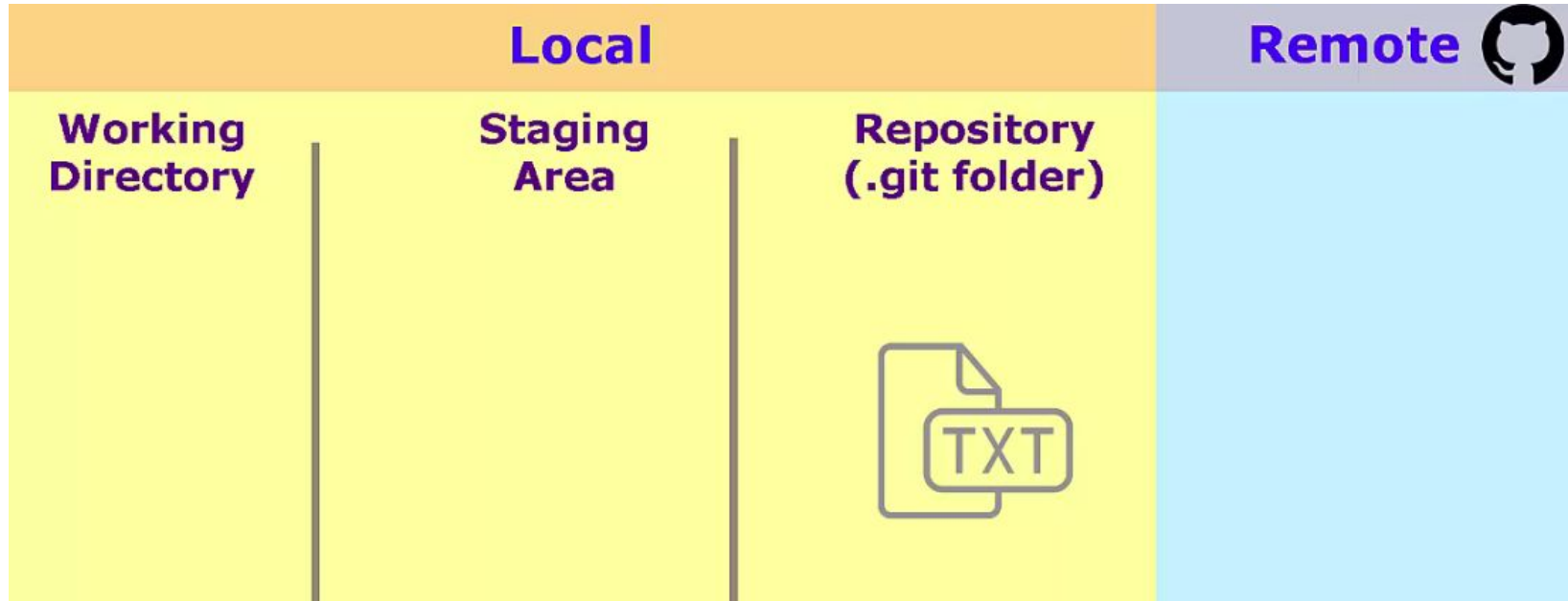


Start.txt file is committed to Local Repository

```
(master) github-demo $ git commit -m "Adding start text file"
[master a3496af] Adding start text file
1 file changed, 1 insertion(+)
 create mode 100644 start.txt
(master) github-demo $ 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 directory clean
(master) github-demo $
```

Now, the start.txt file is in Local Repository -



So far, the file start.txt is on Local Machine, under git Local Repository only and not available in github Remote Repository.

- To verify it, open github repository and check if the file start.txt is listed under repository or not.
- Definitely, we will not find the file start.txt on Remote repository because we did not push the file to remote repository (github) yet.
- Let's push the file start.txt to github remote repository now....

Execute below command to push to github Remote Repository -

git push origin master

Git will prompt for username and password of github account.

```
(master) github-demo $ git push origin master
Username for 'https://github.com': 
Password for 'https://': 
Counting objects: 4, done.
Delta compression using up to 8 threads.
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 309 bytes | 0 bytes/s, done.
Total 3 (delta 0), reused 0 (delta 0)
To https://github.com/
    2a414b1..a3496af  master -> master
(master) github-demo $
```

- Understanding of origin in git push command

```
(master) github-demo $ git push origin master
```

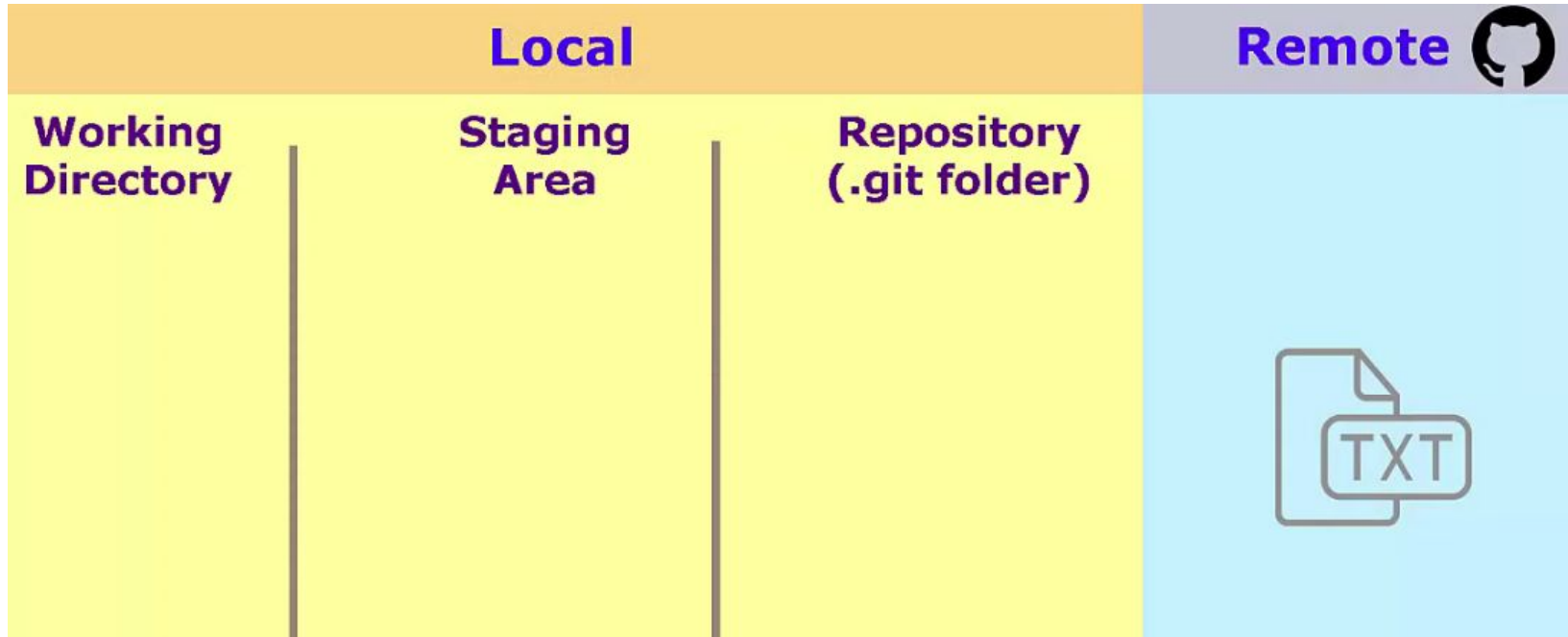
origin refers to the
GitHub copy of our
repository

- Understanding of master in git push command

```
(master) github-demo $ git push origin master
```

master refers to our default and only branch in the repository

- Finally, file start.txt should be in github remote repository, verify it manually on github account.



EXPECTED INTERVIEW QUESTIONS -

Q. How to push the project files from git Local Repository to Remote Repository ?

Q. What are command line arguments for git push ?

Case Study :

A developer in my team when he/she pushes the changes to Remote Repository, committer information shows incorrectly, what could be the issue and how you will fix it?