GIT:- GLOBAL INFORMATION TRACKER

Monday, February 13, 2023 7:56 AM

Web hosting?
1.A web hosting service is type of Internet hosting service that allows individuals and organization to make thier website accessible via world wide web.

2.Web hosts are companies that provide space on a server leased for use bye clients as well as providing internet connectivity,typically in data center.

source_control Managemnet-----Bitkeeper(company)

{vcs----Verion control system
dvcs----Distributed version control system}

What is GIT?

Git is Distributed version control system for tracking changes in source code during s/w developement/ it is desiginged for coordinating work among programmers,but it can be to track changes in any set of files,The goals include speed,data integrity and support for 'distributed'.

Note:- Git is totally working command line utility the help of git bash(windows)

Release:-7th of April 2005

operation system:- POSIX(Linux,Unix,AIX,Solaris),macOS,Windows

REpository:-git.kernel..org/pub/scm/git/git/git/

Licence:-GPLv2(small company),LGPLv2.1(Large company)

website:- git-scm.com

Father of git:- Linus Torvalds

git was totally made ny linux kernel.

Git lateset version:-27 july 2020 ----2.28.0

chapter_2:-
What is VCS?

VCS stands for version control system.

There are 3 types VCS

1.Local VCS:-

locla vcs are totaly depends upon backend database,it's pull the file or folder and also push it similarlly,and main thing of local vcs it's track the data. it's a first concept who is that much capacity to do this type data fetching.

but the main draw back is if your local sys is damaged your total data was destroy, and we have no option to recover this data again. and second drawback is you do not share your data any device.

adv:- Roll back is avialable in loacla vcs.

2.Centralized VCS:-Centralized VCS are totaly depends upon server, and main thing is one to many person are at a time a are used this server for push and pull the files,and it's track the file date also person name who is changes tha data as wll as,

if server was damaged all data was deleted,but only few imp data are saved by any user, if he/she knows that matter,and in the case of server if many person are worked at a time,it's very slow to push and pull method.

3.Distributed VCS:-Distributed VCS are totaly depends upon cloud,and every data are separated by each developer,who is working in own project.if one side of cloud was crashed,so that ni impact other data,
and other data are saved by the could and local system.

Pratical:-

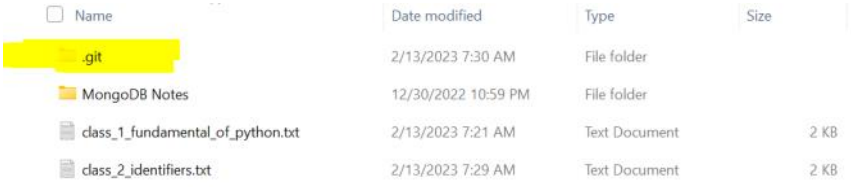
Identity provides to git
there two identity provides to git one is name another is email id.

git config --global user.name "your_name"
git config --global user.email "your@gmail.com"

how check?
git config user.name
git config user.email

1.**$ git init**--create a repo on this file

```
chand@DESKTOP-POMFK5E MINGW64 ~/PycharmProjects/PythonSeleniumProject/SeleniumTe
st
$ git init
Initialized empty Git repository in C:/Users/chand/PycharmProjects/PythonSeleniumProject/SeleniumTest/.git/
```



2. $ **git status**(check the status)

On branch master
No commits yet

Untracked files:

(use "git add <file>..." to include in what will be committed)
biswajit_110cv[1].docx
firs_class.txt

*** file should be in red color--means--this fils is untracked

```
chand@DESKTOP-POMFK5E MINGW64 ~/PycharmProjects/PythonSeleniumProject/SeleniumTest (master)
$ git status
On branch master

No commits yet

Untracked files:
  (use "git add <file>..." to include in what will be committed)
        Miscallanous.py
        __init__.py
        auto_selective_dropsown.py
        basu_int.py
        checkbox_randio_button_dynamic_automatted.py
        explicit_wait.py
        implici_wait.py
        int_pr.py
        python_exception_handeling.py
        screen_shot.png
        screen_shot_1.png
        selenium_iframe.py
        selenium_kt.html
        test_1.py
        test_2.py
        test_3.py
        whatsapp.py
```

3. **git add --a** ----stageing are complgte(Unstage to Stage)

means files should be going to stageing area and file also tracked.

note: if you add single file:- git add .

```
chand@DESKTOP-POMFK5E MINGW64 ~/PycharmProjects/PythonSeleniumProject/SeleniumTest (master)
$ git add --a
```

4.$ git status
On branch master

No commits yet

Changes to be committed:
(use "git rm --cached <file>..." to unstage)
new file: biswajit_110cv[1].docx
new file: firs_class.txt

```
chand@DESKTOP-POMFK5E MINGW64 ~/PycharmProjects/PythonSeleniumProject/SeleniumTest (master)
$ git status
On branch master

No commits yet

Changes to be committed:
  (use "git rm --cached <file>..." to unstage)
        new file:   Miscallanous.py
        new file:   __init__.py
        new file:   auto_selective_dropsown.py
        new file:   basu_int.py
        new file:   checkbox_randio_button_dynamic_automatted.py
        new file:   explicit_wait.py
        new file:   implici_wait.py
        new file:   int_pr.py
        new file:   python_exception_handeling.py
        new file:   screen_shot.png
        new file:   screen_shot_1.png
        new file:   selenium_iframe.py
        new file:   selenium_kt.html
```

5.$ **git commit -m "first_repo"(Version control)**

[master (root-commit) 706f107] first_repo
2 files changed, 1 insertion(+)
create mode 100644 biswajit_110cv[1].docx
create mode 100644 firs_class.txt

```
chand@DESKTOP-P0MFK5E MINGW64 ~/PycharmProjects/PythonSeleniumProject/SeleniumTest (master)
$ git commit -m "new_files_1"
[master (root-commit) 9927f6a] new_files_1
 17 files changed, 473 insertions(+)
 create mode 100644 Miscallanous.py
 create mode 100644 __init__.py
 create mode 100644 auto_selective_dropsown.py
 create mode 100644 basu_int.py
 create mode 100644 checkbox_randio_button_dynamic_automatted.py
 create mode 100644 explicit_wait.py
 create mode 100644 implici_wait.py
 create mode 100644 int_pr.py
 create mode 100644 python_exception_handeling.py
 create mode 100644 screen_shot.png
 create mode 100644 screen_shot_1.png
 create mode 100644 selenium_iframe.py
 create mode 100644 selenium_kt.html
 create mode 100644 test_1.py
 create mode 100644 test_2.py
 create mode 100644 test_3.py
 create mode 100644 whatsapp.py
```

6.$ git status
On branch master
nothing to commit, working tree clean

```
chand@DESKTOP-P0MFK5E MINGW64 ~/PycharmProjects/PythonSeleniumProject/SeleniumTest (master)
$ git status
On branch master
nothing to commit, working tree clean
```

8.**git remote add origin 'paste SSH key'(Repository add)**

```
chand@DESKTOP-P0MFK5E MINGW64 ~/PycharmProjects/PythonSeleniumProject/SeleniumTest (master)
$ git remote add origin https://github.com/ChandraSekharNayak-AT-Py/SeleniumAutomationPythonFiles.git
```

9.**git branch -M main(change master to main and main to master)**

```
chand@DESKTOP-P0MFK5E MINGW64 ~/PycharmProjects/PythonSeleniumProject/SeleniumTest (master)
$ git branch -M main

chand@DESKTOP-P0MFK5E MINGW64 ~/PycharmProjects/PythonSeleniumProject/SeleniumTest (main)
```

10.**git push -u origin main (code send local to cloud)**

```
chand@DESKTOP-P0MFK5E MINGW64 ~/PycharmProjects/PythonSeleniumProject/SeleniumTest (main)
$ git push -u origin main
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Delta compression using up to 4 threads
Compressing objects: 100% (3/3), done.
Writing objects: 100% (3/3), 328 bytes | 328.00 KiB/s, done.
Total 3 (delta 2), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (2/2), completed with 2 local objects.
To https://github.com/ChandraSekharNayak-AT-Py/SeleniumAutomationPythonFiles.git
   9927f6a..2bd3685  main -> main
branch 'main' set up to track 'origin/main'.
```

If -u is not working then use

>> git push -f origin main

```
chand@DESKTOP-P0MFK5E MINGW64 ~/PycharmProjects/PythonSeleniumProject/SeleniumTest (main)
$ git push -f origin main
Enumerating objects: 19, done.
Counting objects: 100% (19/19), done.
Delta compression using up to 4 threads
Compressing objects: 100% (18/18), done.
Writing objects: 100% (19/19), 226.45 KiB | 16.17 MiB/s, done.
Total 19 (delta 4), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (4/4), done.
To https://github.com/ChandraSekharNayak-AT-Py/SeleniumAutomationPythonFiles.git
 + 8f0307a...9927f6a main -> main (forced update)
```

for push the local system to git repositoty

7.

if have no idea how generate ssh then go to this link:-
https://docs.github.com/en/free-pro-team@latest/github/authenticating-to-github/generating-a-new-ssh-key-and-adding-it-to-the-ssh-agent

how Create a SSH key>

1.ssh-keygen -t rsa -b 4096 -C "your_email@example.com"
2.eval $(ssh-agent -s)
3.ssh-add ~/.ssh/id_rsa
4.tail ~/.ssh/id_rsa.pub

then you will get your SSH key

then paste is in SSH key location.

location:-settings:-SSH and GPG KEYS:-New SSH key

***Pull of code ***
In the git when you pull the code that's called cloning.

1.git clone 'SSH key/HTTPS keys'

$ git clone git@github.com:itpp-labs/misc-addons.git
Cloning into 'misc-addons'...
Warning: Permanently added the RSA host key for IP address '13.234.176.102' to the list of known hosts.
remote: Enumerating objects: 40, done.
remote: Counting objects: 100% (40/40), done.
remote: Compressing objects: 100% (34/34), done.
remote: Total 28999 (delta 8), reused 14 (delta 2), pack-reused 28959
Receiving objects: 100% (28999/28999), 29.47 MiB | 2.23 MiB/s, done.
Resolving deltas: 100% (17933/17933), done.