**Step 1:** Create a repository on Github (this might have been already present when we would have started working on project)

GO TO : <https://github.com>

Click **New** :

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**Give Repo details:**

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**Step 2: Configure your Username and email on terminal to talk to GitHub**

git config --global user.name "atulsharma89"

git config --global user.email [sharmaaks50@gmail.com](mailto:sharmaaks50@gmail.com)

Important Note:\* Git hub does does not works on username and password protocol. Instead it uses access tokens which can be generated using following link: <https://docs.github.com/en/authentication/keeping-your-account-and-data-secure/creating-a-personal-access-token>

**Step 3: Cloning a repository**

$ git clone https://github.com/*username*/*repo*.git

Username: *your\_username*

Password: *your\_token*

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(base) MacBook-Pro-106:repository1 atul595525$ **git clone https://github.com/atulsharma89/ML\_DATA\_SCIENCE\_PROJECTS.git**

Cloning into 'ML\_DATA\_SCIENCE\_PROJECTS'...

remote: Enumerating objects: 3, done.

remote: Counting objects: 100% (3/3), done.

remote: Compressing objects: 100% (2/2), done.

remote: Total 3 (delta 0), reused 0 (delta 0), pack-reused 0

Receiving objects: 100% (3/3), done.

(base) MacBook-Pro-106:repository1 atul595525$

(base) MacBook-Pro-106:repository1 atul595525$

**Currently I only have one main branch for this repository**

**Step 3.1: If the repository is already present on local then we can pull the new changes from production:**

**git pull**

**Step 4: Add the newly added files to this repository on your local computer or make changes in the existing files**

(base) MacBook-Pro-106:ML\_DATA\_SCIENCE\_PROJECTS atul595525$ **git add \***

**Step 5: Commit the changed to the stages area:**

(base) MacBook-Pro-106:ML\_DATA\_SCIENCE\_PROJECTS atul595525$ **git commit -m "added Pandas files"**

[main 15974b0] added Pandas files

4 files changed, 67154 insertions(+)

create mode 100644 Day\_01\_Pandas\_zero\_to\_Hero/ETH\_1h.csv

create mode 100644 Day\_01\_Pandas\_zero\_to\_Hero/Python - Pandas - Corey Scahfer.ipynb

create mode 100644 Day\_01\_Pandas\_zero\_to\_Hero/survey\_results\_public.csv.zip

create mode 100644 Day\_01\_Pandas\_zero\_to\_Hero/survey\_results\_schema.csv

**Step 6: Push the changes to the main branch**

(base) MacBook-Pro-106:ML\_DATA\_SCIENCE\_PROJECTS atul595525$ **git push origin main**

Enumerating objects: 8, done.

Counting objects: 100% (8/8), done.

Delta compression using up to 8 threads

Compressing objects: 100% (7/7), done.

Writing objects: 100% (7/7), 18.07 MiB | 2.03 MiB/s, done.

Total 7 (delta 0), reused 0 (delta 0), pack-reused 0

To https://github.com/atulsharma89/ML\_DATA\_SCIENCE\_PROJECTS.git

0b4288d..15974b0 main -> main

(base) MacBook-Pro-106:ML\_DATA\_SCIENCE\_PROJECTS atul595525$

**Step 7: Check the status of branch TO ENSURE ALL the changes are moved to main branch**

(base) MacBook-Pro-106:ML\_DATA\_SCIENCE\_PROJECTS atul595525$ **git status**

Your branch is up to date with 'origin/main'.

nothing to commit, working tree clean

**Step 8: Check on Github server if the newly added changes are available on server:**

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**Important link:** [**https://confluence.atlassian.com/bitbucketserver/basic-git-commands-776639767.html**](https://confluence.atlassian.com/bitbucketserver/basic-git-commands-776639767.html)

**If you are working in a team and want to create a separate branch for your team member then use following commands**

**Step 1: Creating a branch from main branch**

(base) MacBook-Pro-106:ML\_DATA\_SCIENCE\_PROJECTS atul595525$ **git checkout -b uat\_branch**

Switched to a new branch 'uat\_branch'

(base) MacBook-Pro-106:ML\_DATA\_SCIENCE\_PROJECTS atul595525$

**Step 2: Check all the available branches and the branch you are actively on**

(base) MacBook-Pro-106:ML\_DATA\_SCIENCE\_PROJECTS atul595525$ **git branch**

main

\* uat\_branch

(base) MacBook-Pro-106:ML\_DATA\_SCIENCE\_PROJECTS atul595525$

**Step 2.1: Switching from one branch to other**

(base) MacBook-Pro-106:ML\_DATA\_SCIENCE\_PROJECTS atul595525$ **git branch**

main

\* uat\_branch

(base) MacBook-Pro-106:ML\_DATA\_SCIENCE\_PROJECTS atul595525$

(base) MacBook-Pro-106:ML\_DATA\_SCIENCE\_PROJECTS atul595525$

(base) MacBook-Pro-106:ML\_DATA\_SCIENCE\_PROJECTS atul595525$ **git checkout main**

Switched to branch 'main'

Your branch is up to date with 'origin/main'.

(base) MacBook-Pro-106:ML\_DATA\_SCIENCE\_PROJECTS atul595525$

(base) MacBook-Pro-106:ML\_DATA\_SCIENCE\_PROJECTS atul595525$

(base) MacBook-Pro-106:ML\_DATA\_SCIENCE\_PROJECTS atul595525$ git branch

\* main

uat\_branch

(base) MacBook-Pro-106:ML\_DATA\_SCIENCE\_PROJECTS atul595525$

(base) MacBook-Pro-106:ML\_DATA\_SCIENCE\_PROJECTS atul595525$

**Step 3: Add some test file to this branch**

(base) MacBook-Pro-106:ML\_DATA\_SCIENCE\_PROJECTS atul595525$ **cat > test\_file.txt**

This is just a text file

^C

(base) MacBook-Pro-106:ML\_DATA\_SCIENCE\_PROJECTS atul595525$ **ls -ltr**

total 16

drwxr-xr-x 7 atul595525 staff 224 May 8 12:35 Day\_01\_Pandas\_zero\_to\_Hero

-rw-r--r-- 1 atul595525 staff 104 May 8 12:39 README.md

-rw-r--r-- 1 atul595525 staff 25 May 8 13:12 test\_file.txt

**Step 3: Add this newly added file**

(base) MacBook-Pro-106:ML\_DATA\_SCIENCE\_PROJECTS atul595525$ **git add \***

(base) MacBook-Pro-106:ML\_DATA\_SCIENCE\_PROJECTS atul595525$

**Step 4: Commit the changes**

(base) MacBook-Pro-106:ML\_DATA\_SCIENCE\_PROJECTS atul595525$ **git commit -m "added a new branch for UAT"**

[uat\_branch a32006f] added a new branch for UAT

1 file changed, 1 insertion(+)

create mode 100644 test\_file.txt

(base) MacBook-Pro-106:ML\_DATA\_SCIENCE\_PROJECTS atul595525$

**Step 5: Adding these changes to the UAT branch**

(base) MacBook-Pro-106:ML\_DATA\_SCIENCE\_PROJECTS atul595525$ **git push origin uat\_branch**

Enumerating objects: 4, done.

Counting objects: 100% (4/4), done.

Delta compression using up to 8 threads

Compressing objects: 100% (2/2), done.

Writing objects: 100% (3/3), 370 bytes | 370.00 KiB/s, done.

Total 3 (delta 0), reused 0 (delta 0), pack-reused 0

remote:

remote: Create a pull request for 'uat\_branch' on GitHub by visiting:

remote: https://github.com/atulsharma89/ML\_DATA\_SCIENCE\_PROJECTS/pull/new/uat\_branch

remote:

To https://github.com/atulsharma89/ML\_DATA\_SCIENCE\_PROJECTS.git

\* [new branch] uat\_branch -> uat\_branch

**Step 6: Validate if newly added changes are merges to UAT branch or not**

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**Step 7: Compare and pull, before merging the changes to the main branch**

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**If required branch can be deleted too**

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**Graphical user interface, text, application, email

Description automatically generated**

**Git Pull example:**

(base) MacBook-Pro-106:ML\_DATA\_SCIENCE\_PROJECTS atul595525$ ls -ltr

total 8

drwxr-xr-x 7 atul595525 staff 224 May 8 12:35 Day\_01\_Pandas\_zero\_to\_Hero

-rw-r--r-- 1 atul595525 staff 104 May 8 12:39 README.md

(base) MacBook-Pro-106:ML\_DATA\_SCIENCE\_PROJECTS atul595525$

(base) MacBook-Pro-106:ML\_DATA\_SCIENCE\_PROJECTS atul595525$ **git pull**

hint: Pulling without specifying how to reconcile divergent branches is

hint: discouraged. You can squelch this message by running one of the following

hint: commands sometime before your next pull:

hint:

hint: git config pull.rebase false # merge (the default strategy)

hint: git config pull.rebase true # rebase

hint: git config pull.ff only # fast-forward only

hint:

hint: You can replace "git config" with "git config --global" to set a default

hint: preference for all repositories. You can also pass --rebase, --no-rebase,

hint: or --ff-only on the command line to override the configured default per

hint: invocation.

remote: Enumerating objects: 1, done.

remote: Counting objects: 100% (1/1), done.

remote: Total 1 (delta 0), reused 0 (delta 0), pack-reused 0

Unpacking objects: 100% (1/1), 641 bytes | 641.00 KiB/s, done.

From https://github.com/atulsharma89/ML\_DATA\_SCIENCE\_PROJECTS

15974b0..1c10e7b main -> origin/main

Updating 15974b0..1c10e7b

Fast-forward

test\_file.txt | 1 +

1 file changed, 1 insertion(+)

create mode 100644 test\_file.txt

(base) MacBook-Pro-106:ML\_DATA\_SCIENCE\_PROJECTS atul595525$

(base) MacBook-Pro-106:ML\_DATA\_SCIENCE\_PROJECTS atul595525$

(base) MacBook-Pro-106:ML\_DATA\_SCIENCE\_PROJECTS atul595525$

(base) MacBook-Pro-106:ML\_DATA\_SCIENCE\_PROJECTS atul595525$ ls -ltr

total 16

drwxr-xr-x 7 atul595525 staff 224 May 8 12:35 Day\_01\_Pandas\_zero\_to\_Hero

-rw-r--r-- 1 atul595525 staff 104 May 8 12:39 README.md

-rw-r--r-- 1 atul595525 staff 25 May 8 13:31 **test\_file.txt**

(base) MacBook-Pro-106:ML\_DATA\_SCIENCE\_PROJECTS atul595525$