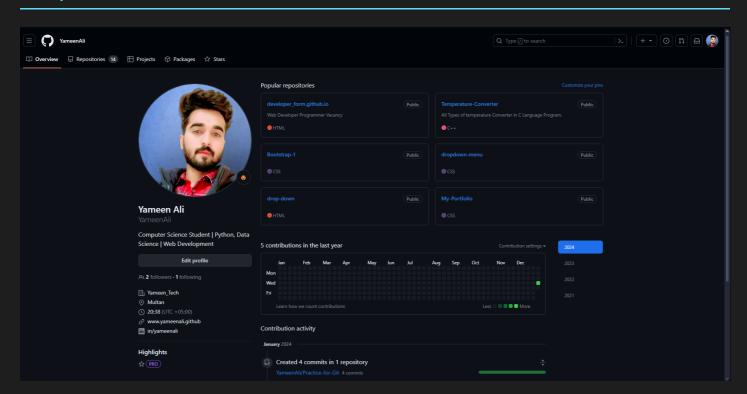
Assignment 2

This assignment aims to familiarize with Git and GitHub by creating a project with multiple branches, incorporating the merge concept, generating a README file, and utilizing the .gitignore file for project management.

Navigate from here

- Step 1 Account in GitHub
- Step 2 Creating a new Repository on Github
- Step 3 Clone the Repository to local machine
- Step 4 Create Multiple Branches
- Step 5 Commit Changes
- Step 6 Merge Branches
- Step 7 Generate a README file
- Step 8 Add .gitignore file
- Step 9 Push Changes to GitHub

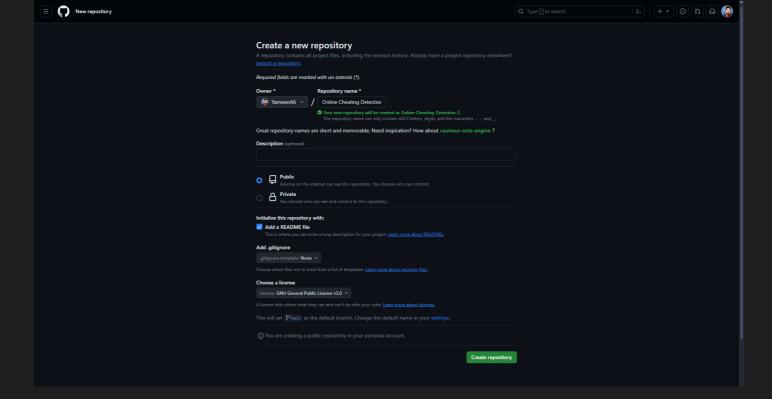
Step 1 - Account in GitHub



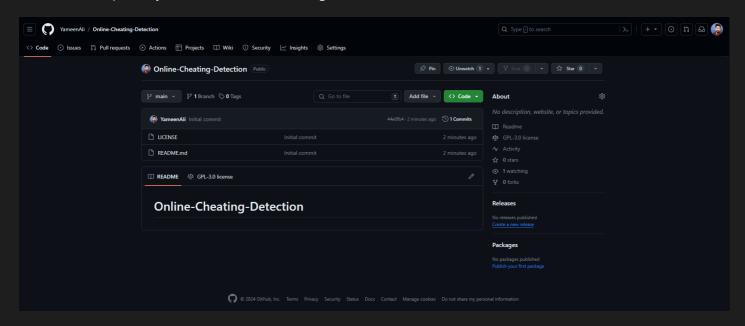
Go To Github Repository

Step 2 - Creating a new Repository on Github

- 1- Create a new repository on GitHub with a name Online Cheating Detection.
- 2- Initialize repository with README.md



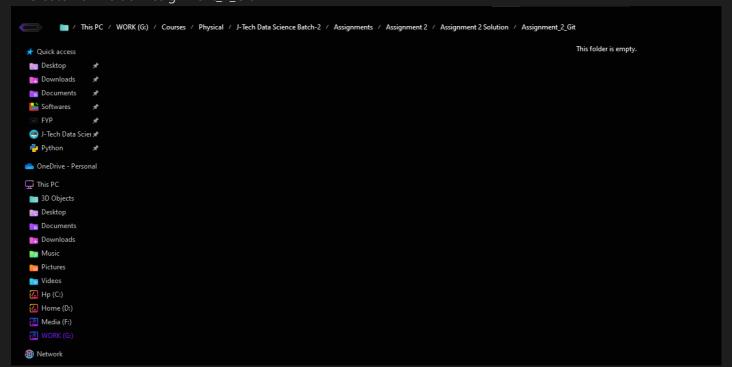
After Create Repository, You can see the following Screen



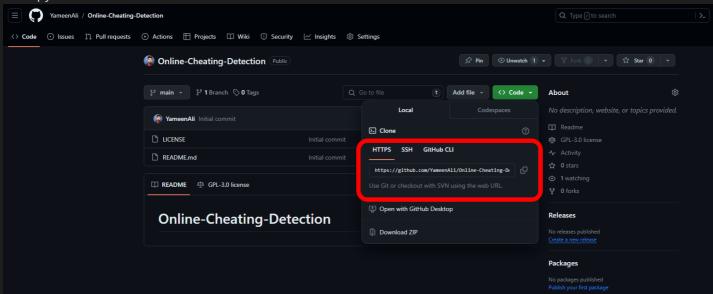
Step 3 - Clone the Repository to local machine

Clone the content from remote repositoy to local repository

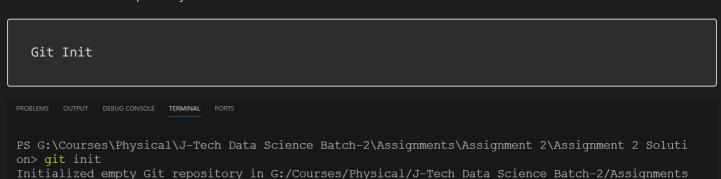
1- Create new Folder Assignment_2_Git



2- Copy the url from here



3- To run Git Clone Command in Terminal first we have to run Git init in a folder where we want to initialize and than clone remote repository.



Git Clone (paste copied url of remote repository)

/Assignment 2/Assignment 2 Solution/.git/

```
ASSIGNMENT 2 SOLUTION

ASSIGNMENT 2 SOLUTION

Sign Online-Cheating-Detection
ULCENSE
READMEnd

Assignment_2md

Assignment_2md

Assignment_2md

Assignment_2md

Receiving objects: 100% (4/4), 12.48 KiB | 2.08 MiB/s, done.
```

Step 4 - Create Multiple Branches

Initially we have main branch now we have to make more branches

```
git branch (branch_name)
```

I created three branches for my project that are listed below by using above command

```
Data Collection and Preprocessing Branch

Model Development Branch

Integration and Deployment Branch

PS G:\Yameen Ali\Assignment 2 Solution\Online-Cheating-Detection> git branch Data_Collection_and_Preprocessing Integration and Deployment
```

Step 5 - Commit Changes

Initial Commit origin/Main

Model Development

* main

```
commit 44e0fb4eaaeca2efc6c3885a14be1578a9d9d007 (origin/main, origin/HEAD)
Author: Yameen Ali <77196593+YameenAli@users.noreply.github.com>
Date: Thu Jan 4 21:28:48 2024 +0500
```

Commit in Main Branch

```
git commit -m "Initialize the project structure and add the main script (main.py)"
```

```
commit cfcddea341e32a7927950dfed5e7b32f7b50a888 (HEAD -> main, Model_Development,
   Integration_and_Deployment, Data_Collection_and_Preprocessing)
Author: Yameen Ali <yameenshah012@gmail.com>
Date: Wed Jan 10 18:40:41 2024 +0500

Initialize the project structure and add the main script (main.py)
```

Commit in Data Collection and Preprocessing Branch

```
git checkout Data_Collection_and_Preprocessing
```

Now we have to commit our changes in this branch

Before committing changes in Git, you need to stage the changes. Staging is the process of preparing and selecting the changes you want to include in the next commit

To add all changes

```
git add .
```

First Commit

25e91d34812f019fa9d118a39d867b0af5813760

commit 25e91d34812f019fa9d118a39d867b0af5813760 (HEAD)

Author: Yameen Ali <yameenshah012@gmail.com>

Date: Sat Jan 13 02:24:40 2024 +0500

Gathered initial dataset from external source.

Second Commit

2b4610414d2ba7d4925e458d3ca989326fa7cce0

```
D ~ III ...
M Assignment_2.md ∪ ■ Data_Collection_Preprocessing.py X
 Online_Exams-Cheating-Detection > 🔁 Data_Collection_Preprocessing.py > 🛇 clean_and_preprocess_data
        # Commit 1: Initial dataset collection
        def gather_initial_dataset():
            # // code here...
            gather_initial_dataset()
  12
        # Commit 2: Data cleaning and preprocessing
       # This commit contains the code for cleaning and preprocessing the dataset.
       def clean_and_preprocess_data():
            # // code here...
  18
            clean_and_preprocess_data()
commit 2b4610414d2ba7d4925e458d3ca989326fa7cce0 (HEAD, Data Collection Preprocessing)
Author: Yameen Ali <yameenshah012@gmail.com>
       Sat Jan 13 02:31:58 2024 +0500
    Data cleaning and preprocessing
```

Commit in Model_Development Branch

First we have to checkout from Data_Collection_Preprocessing branch to Model_Development branch

Now we have to commit our changes in this branch

First Commit

```
e020febad8973247f38050264878624b0de877f8
```

uthor: Yameen Ali <yameenshah012@gmail.com>
ate: Sun Jan 21 20:19:32 2024 +0500

Initial implementation of the cheating detection model

```
58afaa8ada4d19bab67657322aa76355cafa3697
```

```
Model_Development.py 1 X

Online_Exams-Cheating-Detection > Model_Development.py > ...

1
2  # Commit 1: Initial implementation of the cheating detection model

3
4  def initial_model_implementation():
5  # //code here ...
6
7
8
9
10  # Commit 2: Hyperparameter tuning or additional model development steps
11
12  # //code here ...
```

```
commit 58afaa8ada4d19bab67657322aa76355cafa3697 (HEAD -> Model_Development)
Author: Yameen Ali <yameenshah012@gmail.com>
Date: Sun Jan 21 20:25:55 2024 +0500

Hyperparameter tuning or additional model development steps
```

Commit in Integration and Deployment Branch

First we have to checkout from Model_Development branch to Integration_and_Deployment branch

Now we have to commit our changes in this branch

First Commit

f6f702f116367b9e85514a66c25dac10e603a3de

```
PS E:\Yameen Ali\Assignment 2 Solution\Online_Exams-Cheating-Detection> git log commit f6f702f116367b9e85514a66c25dac10e603a3de (HEAD -> Integration_and_Deployment)
Author: Yameen Ali <yameenshah012@gmail.com>
Date: Sun Jan 21 20:38:28 2024 +0500

Integration of the cheating detection model
```

fa262f3bd6fe03cff3b6edc845296c2d37f4e881

```
PS E:\Yameen Ali\Assignment 2 Solution\Online_Exams-Cheating-Detection> git log commit fa262f3bd6fe03cff3b6edc845296c2d37f4e881 (HEAD -> Integration_and_Deployment)
Author: Yameen Ali <yameenshah012@gmail.com>
Date: Sun Jan 21 20:43:24 2024 +0500

Additional steps for deployment or system integration

commit f6f702f116367b9e85514a66c25dac10e603a3de
Author: Yameen Ali <yameenshah012@gmail.com>
Date: Sun Jan 21 20:38:28 2024 +0500

Integration of the cheating detection model
```

Step 6 - Merge Branches

Start with the Main Branch

Ensure you are on the Main branch:

git checkout main

```
PS E:\Yameen Ali\Assignment 2 Solution\Online_Exams-Cheating-Detection> git branch
   Data_Collection_Preprocessing
   Integration_and_Deployment
   Model_Development
* main
```

Merge Data Collection Preprocessing Branch

```
git merge Data_Collection_Preprocessing
```

Merge Model_Development Branch

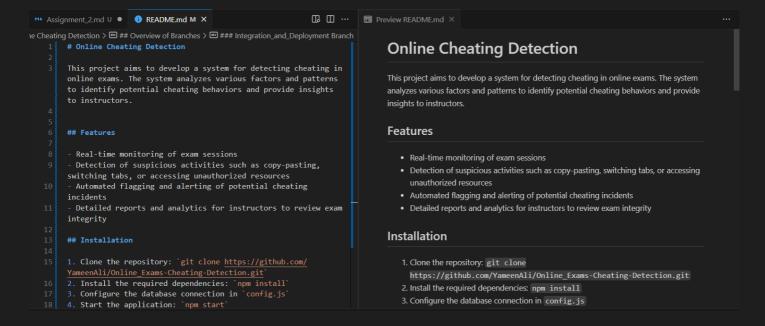
git merge Model_Development

Merge Integration and Deployment Branch

git merge Integration_and_Deployment

Step 7 - Generate a README file

In the Main Branch

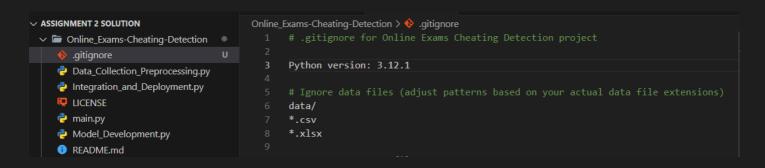


commit into main

```
PS E:\Yameen Ali\Assignment 2 Solution\Online_Exams-Cheating-Detection> git commit -m "Add project overview to README"
[main 3493e73] Add project overview to README
2 files changed, 59 insertions(+), 2 deletions(-)
PS E:\Yameen Ali\Assignment 2 Solution\Online_Exams-Cheating-Detection> git log
commit 3493e73798959c2902f50a597fd41f6815f72cfa (HEAD -> main)
Author: Yameen Ali <yameenshah012@gmail.com>
Date: Sun Jan 21 22:12:37 2024 +0500

Add project overview to README
```

Step 8 - Add .gitignore file



Step 9 - Push Changes to GitHub

git push origin main

```
PS E:\Yameen Ali\Assignment 2 Solution\Online_Exams-Cheating-Detection> git push origin main Enumerating objects: 31, done.

Counting objects: 100% (31/31), done.

Delta compression using up to 4 threads

Compressing objects: 100% (29/29), done.

Writing objects: 100% (29/29), 4.20 KiB | 477.00 KiB/s, done.

Total 29 (delta 14), reused 0 (delta 0), pack-reused 0

remote: Resolving deltas: 100% (14/14), done.

remote: This repository moved. Please use the new location:

remote: https://github.com/YameenAli/Online_Exams-Cheating-Detection.git

To https://github.com/YameenAli/Online-Cheating-Detection.git

44e0fb4..3493e73 main -> main
```

