

St. Francis Institute of Technology, Mumbai-400 103
Department Of Information Technology

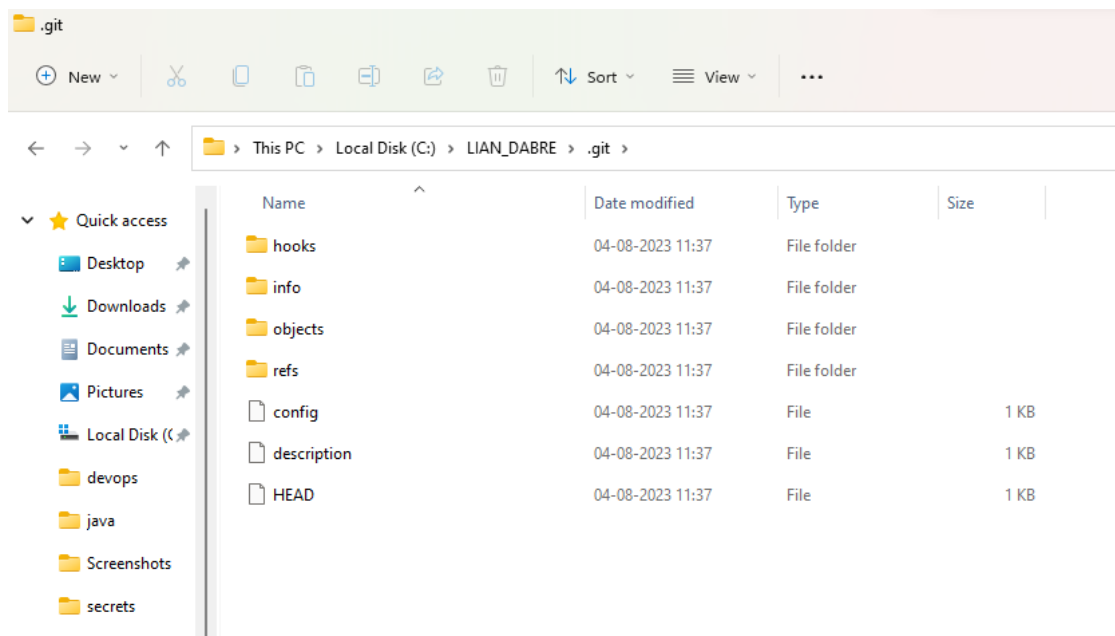
A.Y. 2023-2024

Class: TE-ITA/B, Semester: V

Subject: **DevOps Lab**

**Experiment – 2: To understand version control system/ source code management,
install git and create a GitHub account**

1. **Aim:** To understand version control using Git and create a GitHub account
2. **Objectives:** Aim of this experiment is that, the students will be able
 - To be aware of different Version Control tools like GIT and GitHub
 - To obtain complete knowledge of the “version control system” to effectively track changes augmented with Git and GitHub
3. **Outcomes:** After study of this experiment, the students will be able to
 - GIT Installation
 - Version Control
 - Working with remote repository
4. **Prerequisite:** Knowledge of software engineering concept of version control
5. **Requirements:** Git, Personal Computer, Windows operating system, browser, Internet Connection, Microsoft Word.
6. **Pre-Experiment Exercise:**
Brief Theory: Refer shared material
7. **Laboratory Exercise**
 - A. **Procedure:**
 - a. **Answer the following:**
 - Explain version control and its types
 - What is Git and GitHub?
 - Explain different Git commands
 - b. **Execute following on Git and GitHub (Refer the shared material) and attach screenshots:**
 - Git installation
 - Git commands
 - GitHub account creation
8. **Post-Experiments Exercise**
 - A. **Extended Theory:**
Nil
 - B. **Questions:**
 - What are the different Git areas? Explain with diagram
 - What is a Git conflict?
 - C. **Conclusion:**
 - Write what was performed in the experiment.
 - Write the significance of the topic studied in the experiment.
 - D. **References:**
<https://github.com/>
<https://guides.github.com/activities/hello-world/>
<https://git-scm.com/docs/gittutorial>



```
MINGW64:/c/LIAN_DABRE

Lenovo@IT306A-21 MINGW64 /c/LIAN_DABRE (master)
$ git --version
git version 2.34.1.windows.1

Lenovo@IT306A-21 MINGW64 /c/LIAN_DABRE (master)
$ git init
Reinitialized existing Git repository in C:/LIAN_DABRE/.git/

Lenovo@IT306A-21 MINGW64 /c/LIAN_DABRE (master)
$ git status
On branch master

No commits yet

nothing to commit (create/copy files and use "git add" to track)

Lenovo@IT306A-21 MINGW64 /c/LIAN_DABRE (master)
$ |
```

```
MINGW64:/c/LIAN_DABRE

Lenovo@IT306A-21 MINGW64 /c/LIAN_DABRE (master)
$ git config --global user.name "liandabre"

Lenovo@IT306A-21 MINGW64 /c/LIAN_DABRE (master)
$ git config --global user.email "liandabre2262003@student.sfit.ac.in"

Lenovo@IT306A-21 MINGW64 /c/LIAN_DABRE (master)
$ git config --global --list
user.email=liandabre2262003@student.sfit.ac.in
user.name=liandabre
```

MINGW64:/c/LIAN_DABRE

```
$ git status
on branch master

No commits yet

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

nothing added to commit but untracked files present (use "git add" to track)
```

Lenovo@IT306A-21 MINGW64 /c/LIAN_DABRE (master)

```
$ git add 1.docx
```

Lenovo@IT306A-21 MINGW64 /c/LIAN_DABRE (master)

```
$ git status
```

on branch master

No commits yet

Changes to be committed:

```
(use "git rm --cached <file>..." to unstage)
    new file:   1.docx
```

Untracked files:

```
(use "git add <file>..." to include in what will be committed)
    2.docx
```

MINGW64:/c/LIAN_DABRE

Lenovo@IT306A-21 MINGW64 /c/LIAN_DABRE (master)

```
$ git add .
```

Lenovo@IT306A-21 MINGW64 /c/LIAN_DABRE (master)

```
$ git status
```

On branch master

No commits yet

Changes to be committed:

```
(use "git rm --cached <file>..." to unstage)
    new file:   1.docx
    new file:   2.docx
    new file:   3.docx
```

MINGW64:/c/LIAN_DABRE

Lenovo@IT306A-21 MINGW64 /c/LIAN_DABRE (master)

```
$ git log --oneline
```

```
3cdeea6 (HEAD -> master) Third Commit
```

```
dbe7917 Second Commit
```

```
19ae064 First Commit
```

Lenovo@IT306A-21 MINGW64 /c/LIAN_DABRE (master)

```
$ git log --oneline 2.docx
```

```
19ae064 First Commit
```

Lenovo@IT306A-21 MINGW64 /c/LIAN_DABRE (master)

```
$ git log --oneline <3cdeea6>
```

```
bash: syntax error near unexpected token `newline'
```

Lenovo@IT306A-21 MINGW64 /c/LIAN_DABRE (master)

```
$ git log --oneline 3cdeea6
```

```
3cdeea6 (HEAD -> master) Third Commit
```

```
dbe7917 Second Commit
```

```
19ae064 First Commit
```

Lenovo@IT306A-21 MINGW64 /c/LIAN_DABRE (master)

```
$
```

MINGW64:/c/LIAN_DABRE

```
Lenovo@IT306A-21 MINGW64 /c/LIAN_DABRE (master)
$ git commit --m 'First Commit'
[master (root-commit) 19ae064] First Commit
3 files changed, 0 insertions(+), 0 deletions(-)
create mode 100644 1.docx
create mode 100644 2.docx
create mode 100644 3.docx
```


```
Lenovo@IT306A-21 MINGW64 /c/LIAN_DABRE (master)
$ git add .
```

```
Lenovo@IT306A-21 MINGW64 /c/LIAN_DABRE (master)
$ git commit --m 'Second Commit'
[master dbe7917] Second Commit
1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 4.docx
```

```
Lenovo@IT306A-21 MINGW64 /c/LIAN_DABRE (master)
$ git add .
```

```
Lenovo@IT306A-21 MINGW64 /c/LIAN_DABRE (master)
$ git commit --m 'Third Commit'
[master 3cdeea6] Third Commit
1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 5.docx
```

```
Lenovo@IT306A-21 MINGW64 /c/LIAN_DABRE (master)
```

 **liandab**

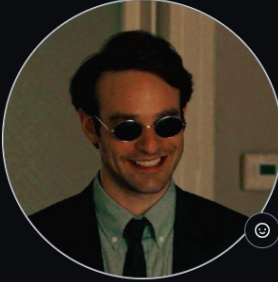
Overview

Repositories 14

Projects

Packages

Stars




Lian Dabre
liandab
Hello there, am Lian
[Edit profile](#)
Mumbai, India
@DabreLian
Highlights
PRO

liandab / README.md

- Hi, I'm Lian Dabre
- I'm interested in programming
- I'm currently learning Java and JS
- How to reach me ogliandabre@gmail.com

Pinned

 **liandab** (Public)
Config files for my GitHub profile.

6 contributions in the last year

Aug

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