

WAPH-jaindy Web Application Programming and Hacking

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Student

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Short-bio: Work experience of more than 6 years in IT Industry. Specialize in Analysis, Development, Design, Testing, Debugging and Implementation of Web Applications.



Figure 1: Divyani Headshot!

Repository Information

Repository's URL: <https://github.com/jaindy/waph-jaindy.git>

This is a private repository for divyani Jain to store all code from the course. The organization of this repository is as follows.

Lab 0 - Development Environment Setup

The lab's overview

In this Lab0, we have installed Virtual machine and created a private git repository which has shared with instructor. Also, we learned GIT operation such as git pull, add, commit and push the changes. In the main README.md file we have updated instructor and student detail and provided path to Lab0 assignment. We have also created another folder under labs/lab0/README.md. This file

has all the information covered in lecture 1 and lecture 2 along with screenshot. .
Lab0 folder link: <https://github.com/jaindy/waph-jaindy/tree/main/labs/lab0>.

Part I - Ubuntu Virtual Machine & Software Installation

Below are the steps performed to install Ubuntu virtual machine.

1. Open google Chrome and enter the URL : [<https://sandbox02.cech.uc.edu/vcac>]
2. Select the domain ad.uc.edu and click on next.
3. Enter your UC username and password and click next.
4. Click on Request link under the course name web application and hacking to create VM.
5. Click on Ubuntu icon and provide machine name and click Submit.
6. Under the deployment tab, your VM is created.
7. Click on setting icon and connect to remote console.
8. Provide administrator password and press Enter.
9. Open Terminal and check the directory path using command pwd.

Below are the commands used to install softwares.

1. Installed net-tools and run command ifconfig.
2. Installed apache web server using `sudo apt install apache2`
3. Installed Git using `sudo apt install git`
4. Installed git editor using `sudo snap install sublime-text --classic`
5. Installed pandoc to convert markdown files to pdf. Installed pdflatex.
6. Installed google chrome using `sudo apt install ./google-chrome-stable_current_amd64.deb`

Apache Web Server Testing

Apache Web Server is running properly in google chrome.

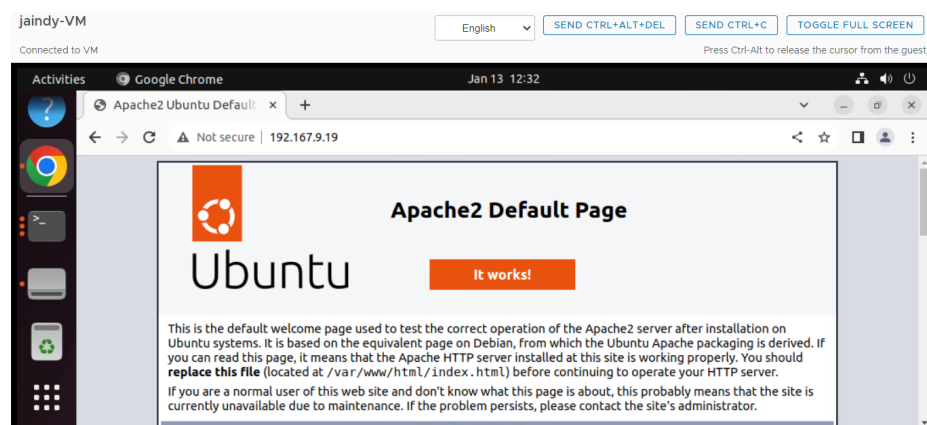
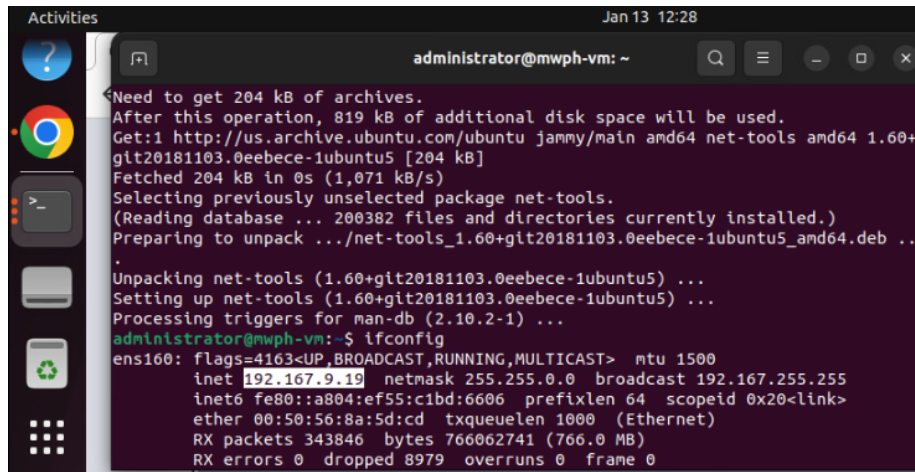


Figure 2: Apache2



```
Activities Jan 13 12:28 administrator@mwph-vm: ~
Need to get 204 kB of archives.
After this operation, 819 kB of additional disk space will be used.
Get:1 http://us.archive.ubuntu.com/ubuntu jammy/main amd64 net-tools amd64 1.60+git20181103.0eebece-1ubuntu5 [204 kB]
Fetched 204 kB in 0s (1,071 kB/s)
Selecting previously unselected package net-tools.
(Reading database ... 200382 files and directories currently installed.)
Preparing to unpack .../net-tools_1.60+git20181103.0eebece-1ubuntu5_amd64.deb ...
Unpacking net-tools (1.60+git20181103.0eebece-1ubuntu5) ...
Setting up net-tools (1.60+git20181103.0eebece-1ubuntu5) ...
Processing triggers for man-db (2.10.2-1) ...
administrator@mwph-vm:~$ ifconfig
ens160: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
    inet 192.167.9.19 netmask 255.255.0.0 broadcast 192.167.255.255
    inet6 fe80::a804:ef55:c1bd:6606 prefixlen 64 scopeid 0x20<link>
    ether 00:50:56:8a:5d:cd txqueuelen 1000 (Ethernet)
    RX packets 343846 bytes 766062741 (766.0 MB)
    RX errors 0 dropped 8979 overruns 0 frame 0
```

Figure 3: IPAddress

Part II - git Repositories and Exercises

Installed Git and modified the README.md file and perform git operation such as git pull, git add, git commit and push.

The course repository

Cloned the course repository into the home directory:

Private Repository

Full URL of private repository: [<https://github.com/jaindy/waph-jaindy.git>]
(<https://github.com/jaindy/waph-jaindy.git>).

Below are the steps performed to create Private Repository. 1. Open chrome and create a new account in GIT with your university email and create a private repository. 2. Share private repository with your instructor.

Generated SSH key and added in github.

```
Jan 14 12:37
administrator@mwph-vm: ~/waph-jaindy

administrator@mwph-vm:~$ sudo apt install git
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  git-man liberror-perl
Suggested packages:
  git-daemon-run | git-daemon-sysvinit git-doc git-email git-gui gitk gitweb
  git-cvs git-mediawiki git-svn
The following NEW packages will be installed:
  git git-man liberror-perl
0 upgraded, 3 newly installed, 0 to remove and 13 not upgraded.
Need to get 4,147 kB of archives.
After this operation, 21.0 MB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 http://us.archive.ubuntu.com/ubuntu jammy/main amd64 liberror-perl all 0.1
7029-1 [26.5 kB]
Get:2 http://us.archive.ubuntu.com/ubuntu jammy-updates/main amd64 git-man all 1
```

Figure 4: GitInstall

```
jaindy-VM
Connected to VM

Jan 14 17:21
administrator@mwph-vm: ~/waph-jaindy

administrator@mwph-vm:~/waph-jaindy/labs$ cd lab0
administrator@mwph-vm:~/waph-jaindy/labs/lab0$ ls
README.md
administrator@mwph-vm:~/waph-jaindy/labs/lab0$ subl README.md
administrator@mwph-vm:~/waph-jaindy/labs/lab0$ git status
interactive rebase in progress; onto 80baf34
Last command done (1 command done):
  pick 095a0ed Added instructor an dstudent details in README.md file
No commands remaining.
You are currently editing a commit while rebasing branch 'main' on '80baf34'.
(use "git commit --amend" to amend the current commit)
(use "git rebase --continue" once you are satisfied with your changes)

Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory)
        modified:   README.md

no changes added to commit (use "git add" and/or "git commit -a")
administrator@mwph-vm:~/waph-jaindy/labs/lab0$ git add README.md
administrator@mwph-vm:~/waph-jaindy/labs/lab0$ git commit -m "Lab0 setup"
[detached HEAD 34dde0b] Lab0 setup
 1 file changed, 68 insertions(+)
administrator@mwph-vm:~/waph-jaindy/labs/lab0$ git push
fatal: You are not currently on a branch.
To push the history leading to the current (detached HEAD)
state now, use

    git push origin HEAD:<name-of-remote-branch>

administrator@mwph-vm:~/waph-jaindy/labs/lab0$
```

Figure 5: Modify Readme

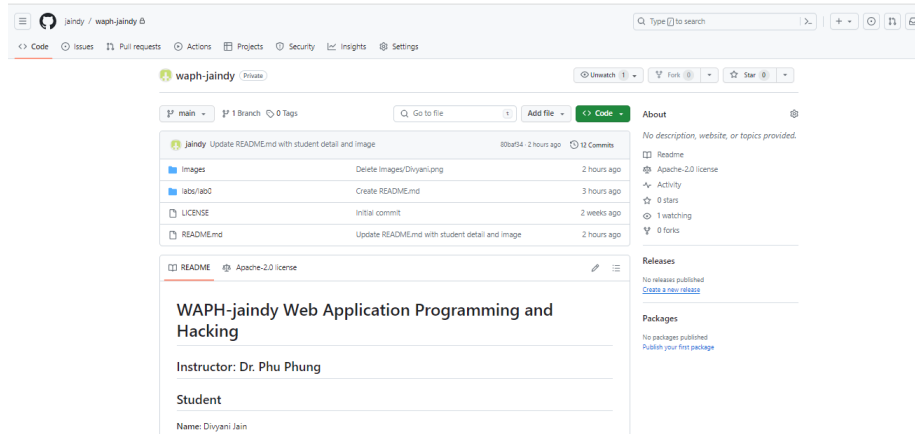


Figure 6: Update Readme

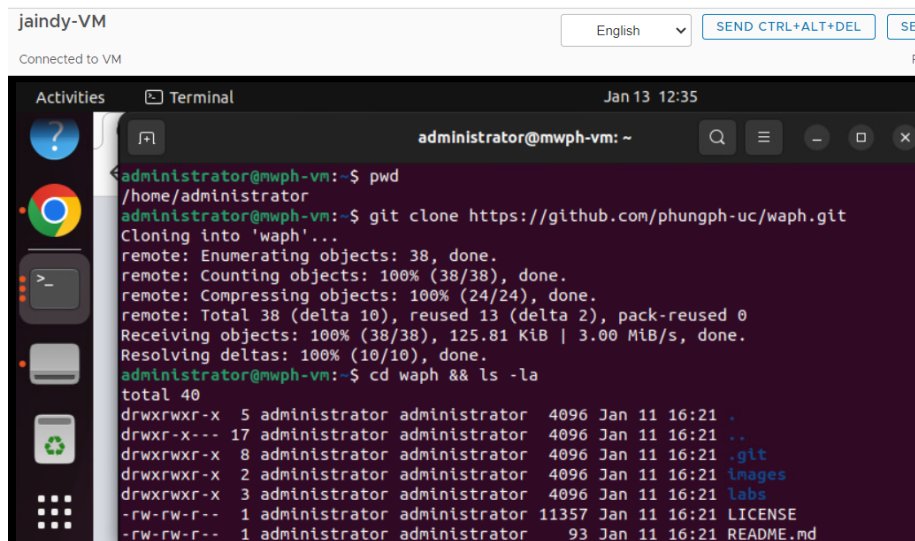


Figure 7: Gitclone

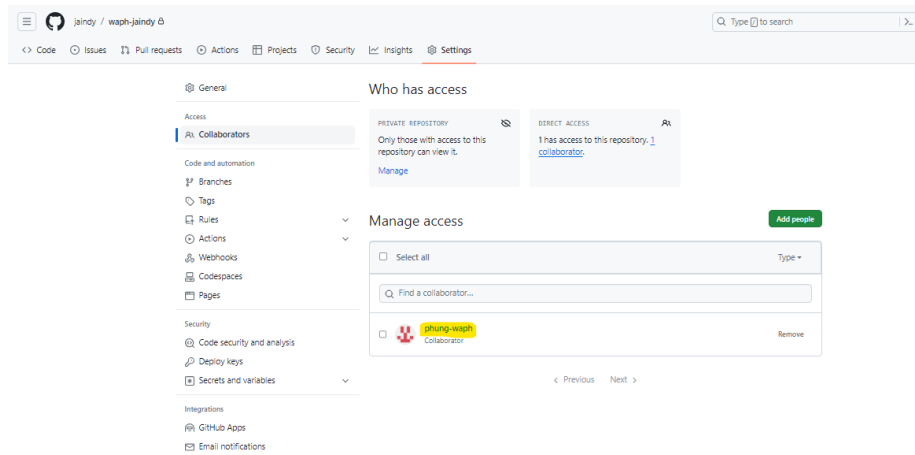


Figure 8: PrivateRepository

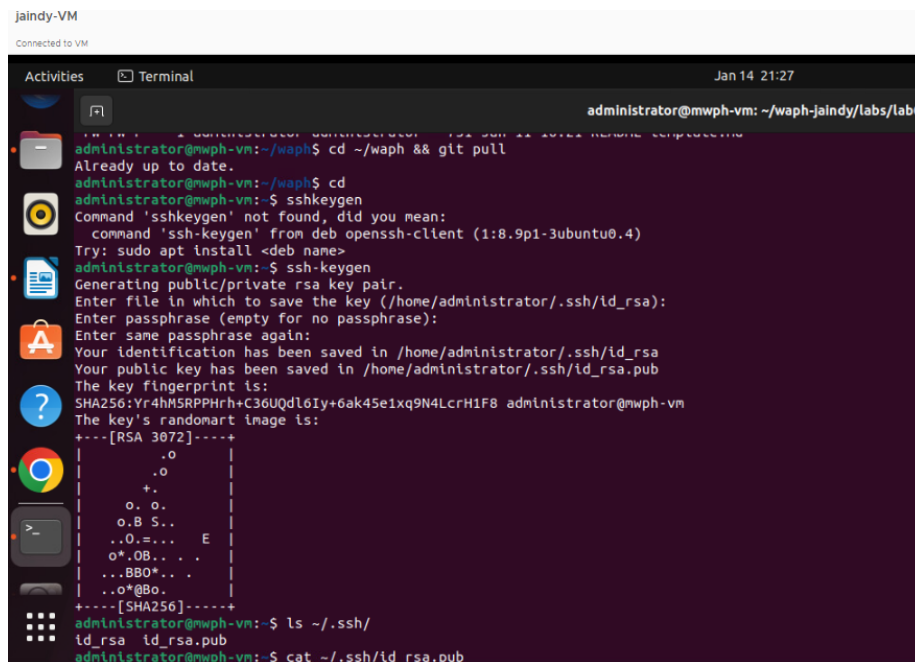


Figure 9: SSHKey

```
administrator@mwph-vm: ~/waph-jaindy/labs/lab0
o. o.
o.B S..
..O.=... E
o*.OB...
...BBO*...
..o*@Bo.
+----[SHA256]-----+
administrator@mwph-vm:~$ ls ~/.ssh/
id_rsa  id_rsa.pub
administrator@mwph-vm:~$ cat ~/.ssh/id_rsa.pub
ssh-rsa AAAAB3NzaC1yc2EAAAADAQABAAQgQC1xbrc7XBxsoin2oc8s75unaLPD3Ns24nzhdo/QGv
Kgc9x+X0ThhXML1fg+eDabIUge2UnQphXtoS0jPai4bmz0fByXGLbf1G05cEZSspPZ1e9v8xujQ50HU
h9HSzFdaVBl4PlKQud4+Dwha2aox/x8VWXGm8ncWcSDdDhuE+IysKCdzZyr6nTkSudzrq8Wzv0IbuJk
Do1gwtlEEqbg1EQFyhJladNgtQudQnMFYrGs0oebY2N3X/HazqgVy2dUQaaSfJroJcKYTOraZCagaIj
gHU+VRzneJP8MsB+VegA7nGLBHeCpMGyXafIZUFavWz/+M+PiDpTOP84mfPGXVeSGrIS79fUoK3ayp1
0btMb0nIQwlm2DsbBG4CVKN6W01j/6qFvffCtMCNZH5+JtA9uo6SnTcm4/7/laIDDUxIHzeHzn6l7La
gUBwM//iVjl6HLKhMz8ChnTt3hLLW7cNDRSTfkihuI6g+KkZH0JoAAOhrLOl+OxmtwYJMi1iu71sM=
administrator@mwph-vm
```

Figure 10: SSH key generate

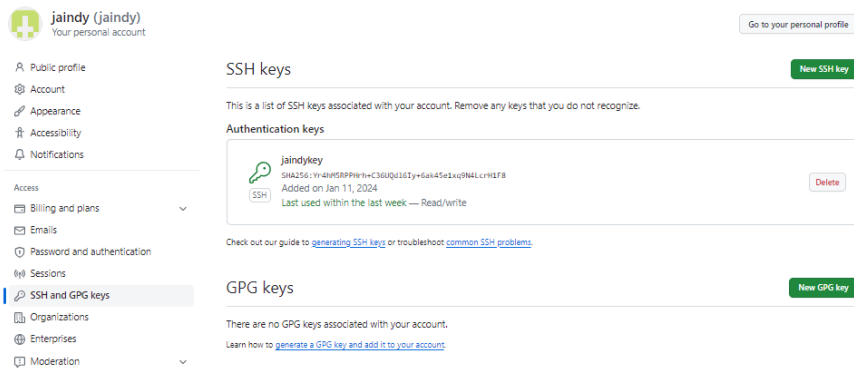


Figure 11: add ssh key

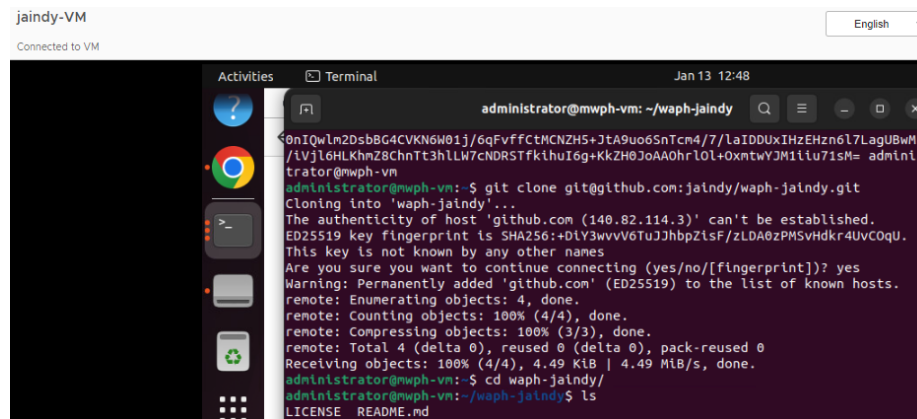


Figure 12: Private Repository

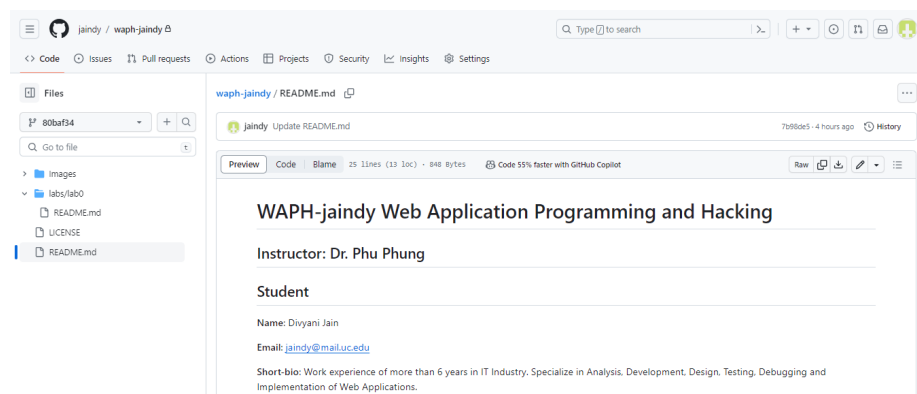


Figure 13: Update Readme

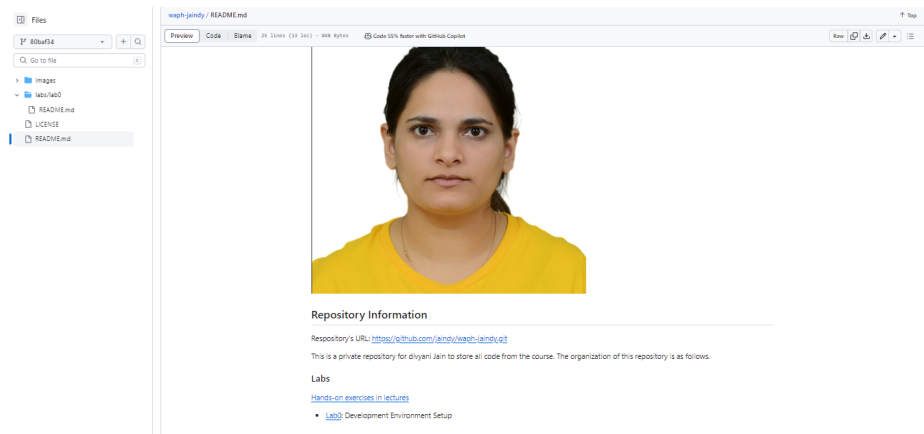


Figure 14: Update Readme