**NAME : S M Musfikur Rahman**

**2nd year , 1st term**

**Student ID : 190224**

**Course Title : CSE 2113 – Advanced Programming**

**Discipline : Computer Science and Engineering**

**DUAL BOOT UBUNTU\_WINDOWS 10 & SETUP GIT TO PERFORM PUSH AND CLONE**

The dual boot refers to running two operating systems in our computer system and the ability to choose which operating system to boot at startup. In this report, I am trying to explain how I am installing ubuntu and windows 10 in dual boot.

**Pre-Requisites :-**

1. Windows 10 laptop or desktop
2. Pen drive (8GB+)
3. 100 GB free space in the system

**Downloaded file :-**

1. Ubuntu ISO file (for me 20.04LTS latest)

https://ubuntu.com/download/desktop

1. Rufus 3.14

https://rufus.ie/en/

**PROCESS :-**

**DUAL BOOT :-**

1. After downloading the file, I checked the type of **partition** of the disk.

* In the search box type “disk management” and press enter.
* Right-click on “Disk 0” > properties > volume : partition type.

1. Then using “Rufus 3.14” make the Pen drive bootable

Open Rufus > select Pen drive > browse ubuntu ISO > select partition type > click start > close > unplug Pen drive and plugin again.

1. Making a free space for installing ubuntu. By delating a local drive or shrinking some space.
2. Restarting the pc and press F12 for opening the boot menu and select UEFI with the name of Pen drive and press enter.
3. Then a choice form was available.
4. Press enter “ubuntu”.
5. Then the install page appeared.
6. Install ubuntu > select English > select English > normal installation + install third party….> something else >installation type.
7. Setting up installation type

* Select free space > click “+”> size 20GB + click “logical+ beginning + /”
* Select free space > size 50GB + click “logical+ beginning + /home”
* Select free space > size 4096
* MB + click “logical+ beginning + swap area”
* In the bootloader installation menu select “windows boot manager”.
* Select windows boot manager and press install now.
* Select location
* Fill out the form username, pc name and password.
* Press continue>
* Wait for full installation.
* Remove the installation media and press enter.
* From the GRUB menu select “Ubuntu” or “windows boot manager” as one wishes.

1. Installation complete.

**INSTALL GIT :-**

Open terminal > write

git

Press enter. it will show that git is not found.

For installing git type the following line

sudo apt install git

and press enter. It was asking for the password. Then complete the installation. Type

git --version

Press enter. It showed me the version of git.

**PUSH :-**

I opened a GitHub account from the browser. Create a new repository.

Create a folder in ubuntu named Day1.

Inside the folder, create a file using terminal

touch file1.txt

and write something inside it. Inside the folder open in the terminal write

git init

and press enter. Then

git status

Press enter. Configure the username password

git config --global user.name “……..”

git config --global user.email “……@....”

git config --list

git commit -m “first commit”

Copy remote origin from GitHub repository. Paste it into the terminal and press enter, type username and password and refresh the browser.

The folder push into the GitHub.

**CLONE :-**

Click code on the GitHub repository. Click the link. In the terminal write

git clone paste the link

Press enter. Cloning done.

**I HAVE learned** a lot of things like how to operate two operating systems on one pc. How to setup up git in ubuntu and perform push and clone. How to use GitHub.

**FACED PROBLEM AND SOLVED TECHNIQUE**

When performing a push operation in git inside the terminal, ubuntu shows up a message “support for password authentication was removed on August 13, 2021.” Then I had to create a personal access token for accessing it and solve the problem.

It is a new experience for me. I am so glad to use two in one system. And culture the code in GitHub in a systematic way. And I think from this article beginners can get adequate knowledge in this field.