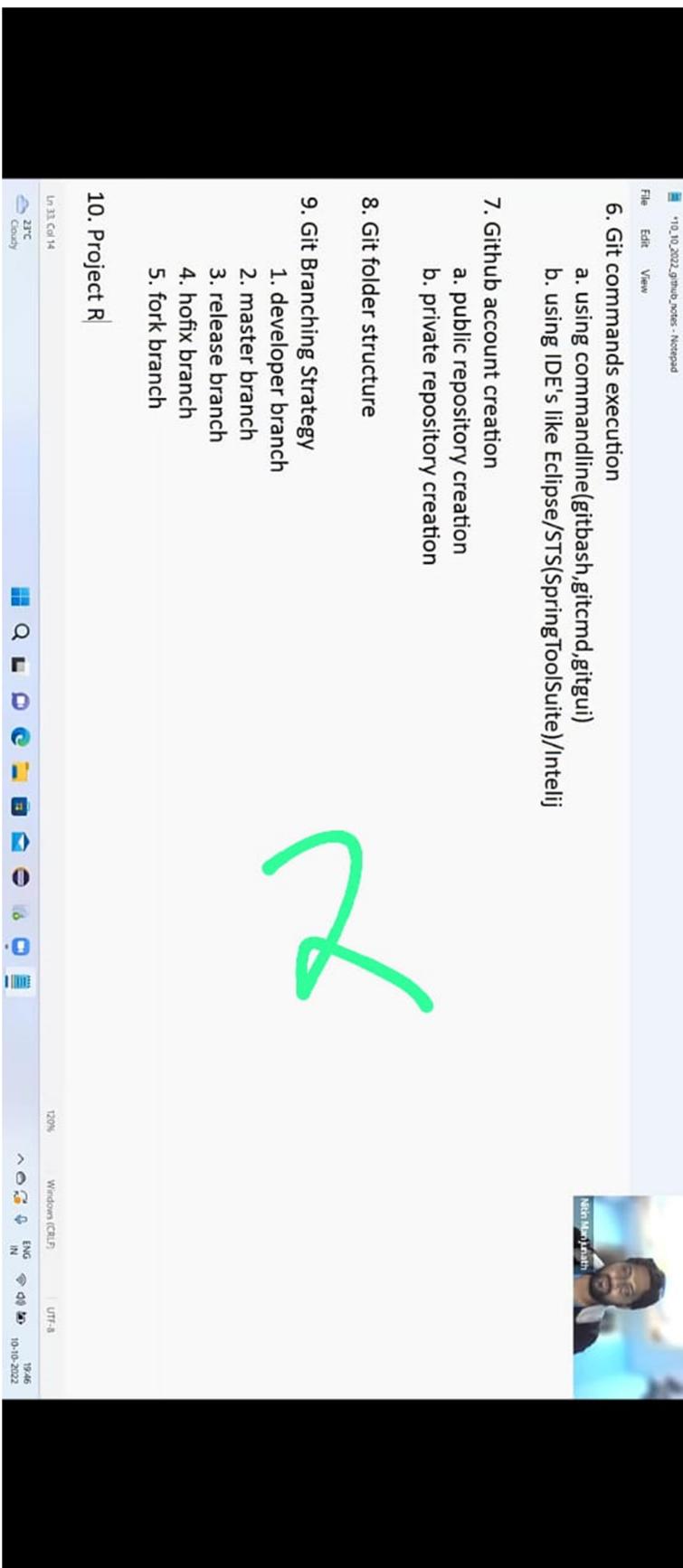
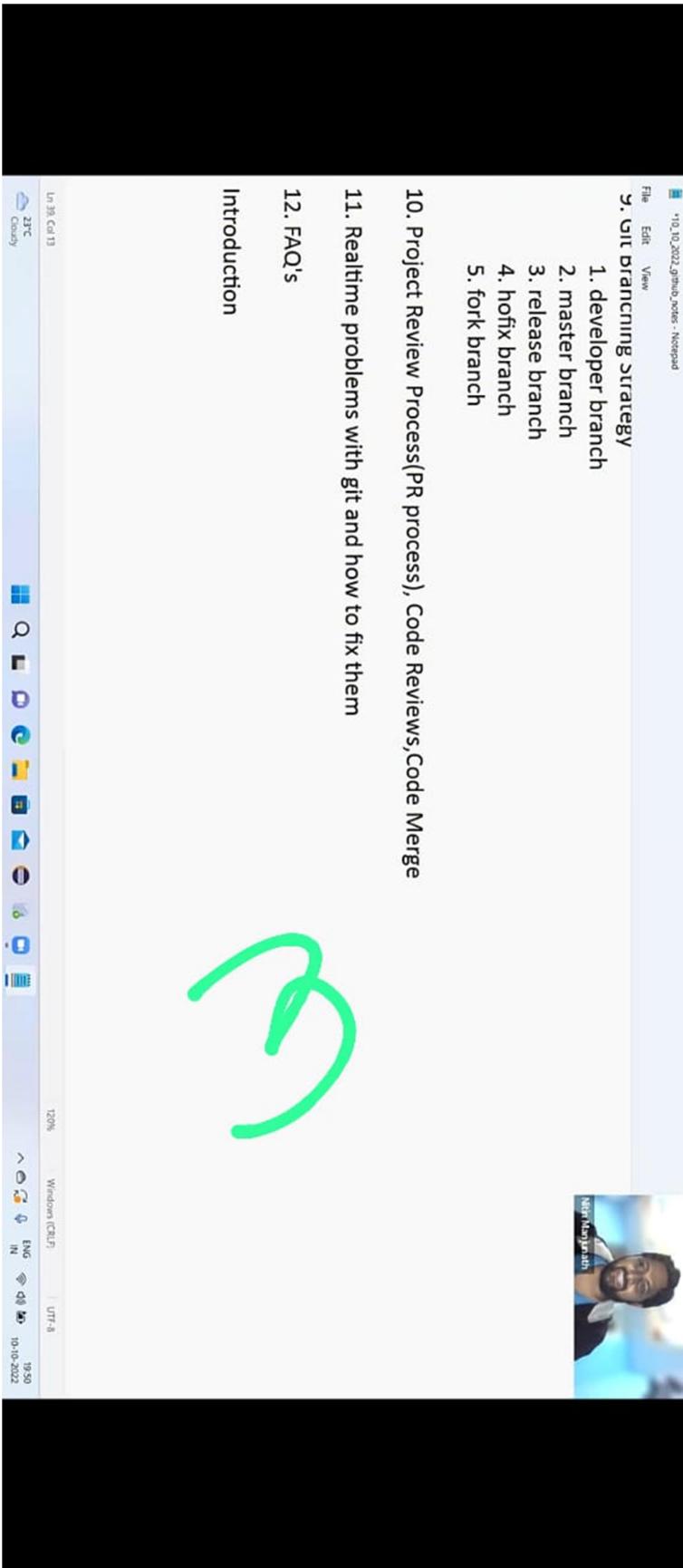


Git And Github







10. Project Review Process(PR process), Code Reviews, Code Merge
 11. Realtime problems with git and how to fix them
 12. FAQ's
- Introduction

10_10_2022_3.html_notes - notepad

Introduction

A small portrait of Nitin Manjunath, a man with dark hair and glasses, wearing a dark shirt. The photo is set against a blue background.

=> Git is a popular Version Control system (VCS)
=> It was created by Linus Torvalds in 2005 and it is maintained by Junio Hamano

Git is used for

- a. Tracking code changes
 - b. Tracking who made the changes like history of files
 - c. Coding Collaborations

4

What is VersionControl System(VCS) and types of VCS?

It is a system that records changes made to the file or set of files over the time, so that we can recall the specific version later.

ie, for every source code change in a file a new version will be created
eg: JDK1.0V, JDK1.1V, JDK1.2V,.....

Types of Version Control Software(VCS)

- a. Local Version Control System
 - b. Centralized Version Control System
 - c. Distributed Version Control System



10.10.2022.github.pdf - Notepad

File Edit View

c. Distributed Version Control System

Local Version Control System
=> It is used to maintain the file version and retrieve the files based on the specific version
refer : LocalVersionControlSystem.png

To overcome the drawback of LocalVersionControl System we have "Centralized Version Control System".

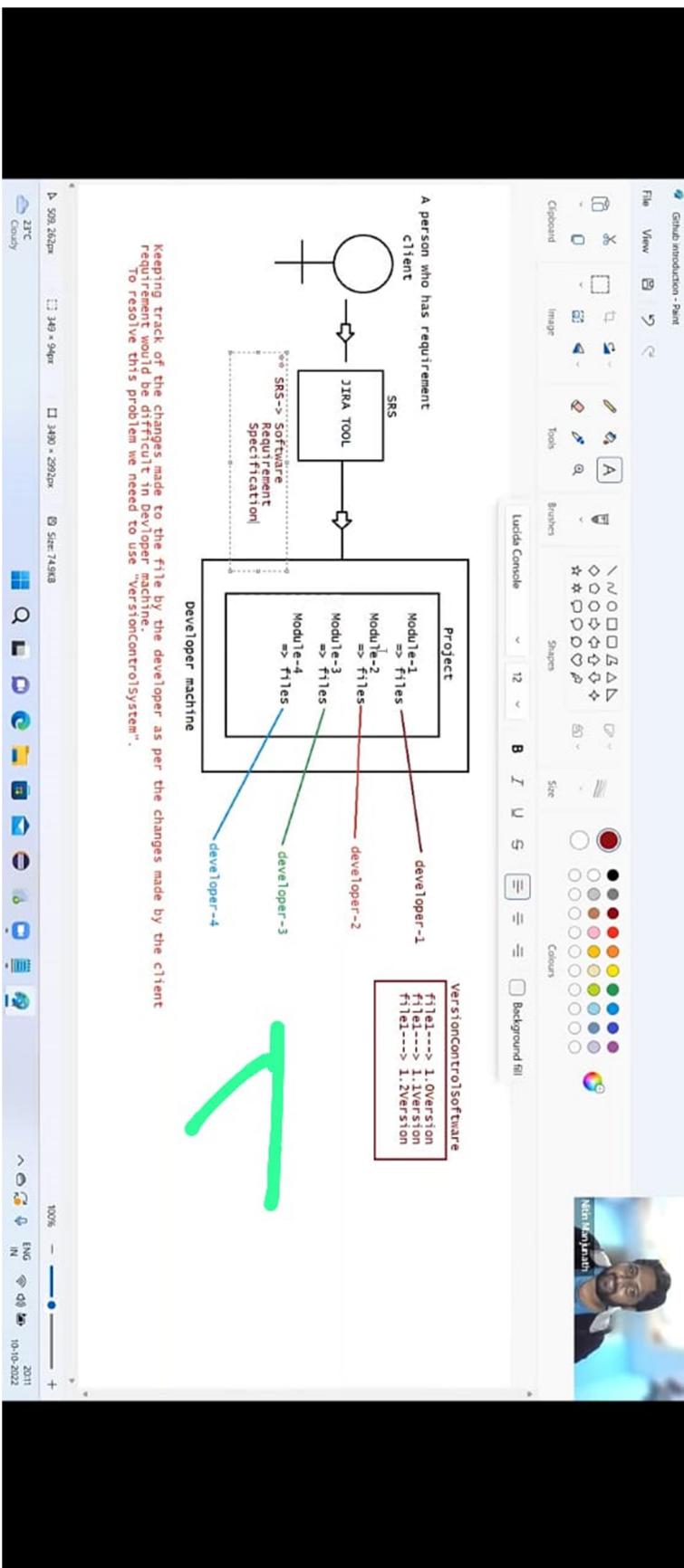
Centralized Version Computer

=====

6

Ln 73 Col 8 100% Windows (CRLF) UTF-8

22°C Cloudy ENG IN 10-10-2022 20:34



harddisk	
C drive file -1.0V	E Drive file- 1.1V
D Drive file-1.2V	F Drive file-1.3V

Developer machine



Drawbacks

1. It is easy to forget in which driver you are in and accidentally write the data to the worn file or copy from other files.
2. If the hard disk is corrupted there would a possible loss of secured data.
3. By mistake we can delete few files also.

*10.10.2022.github-pages - Notepad

File Edit View

To overcome the drawback of Local Version Control System we have "Centralized Version Control".



Centralized Version Computer

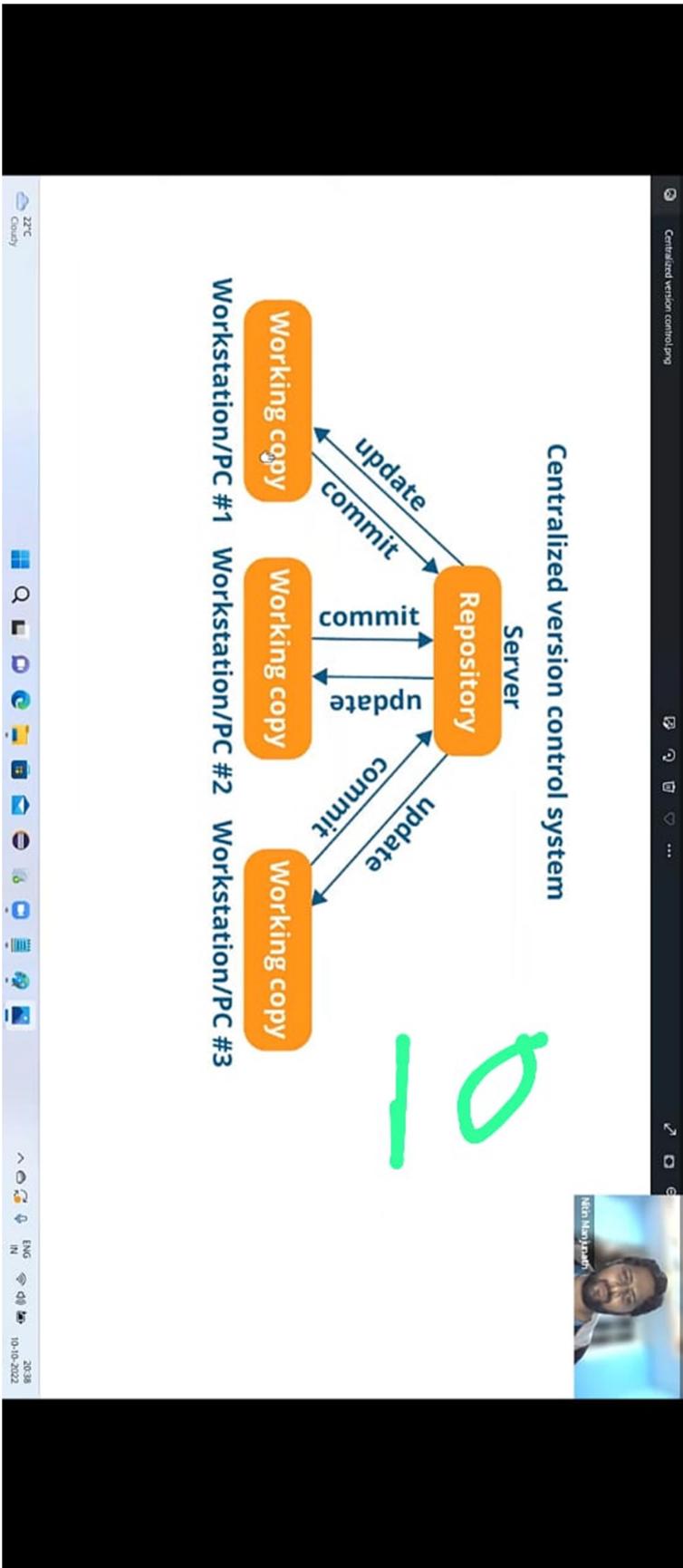
=> Developers can collaborate the code in one repository and do the change.
eg of Centralized Version softwares: SVN, Subversion, Perforce,.....

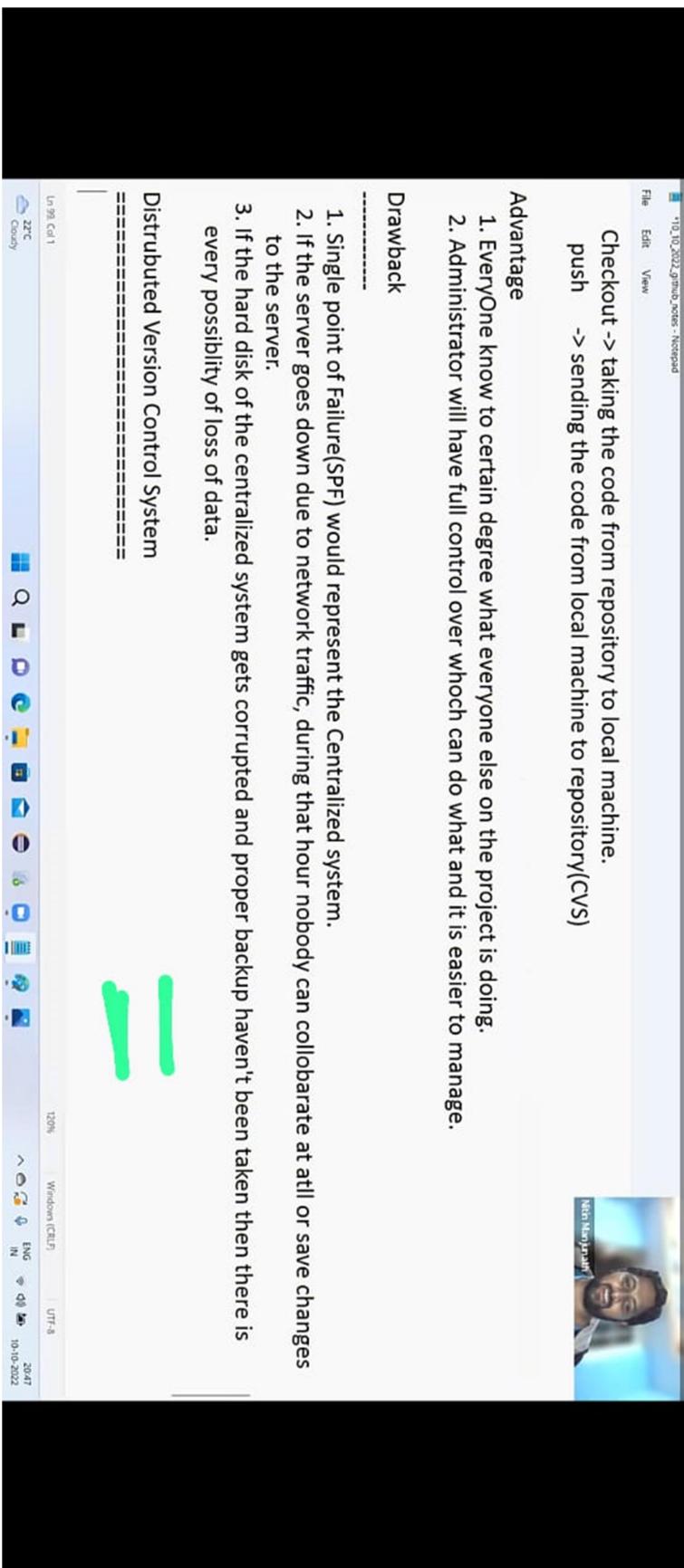
=> Centralized Version server will have single server that contains all the version files
=> For many years this has been the standard version control system
=> More no of developers would connect to CVS to checkout the files

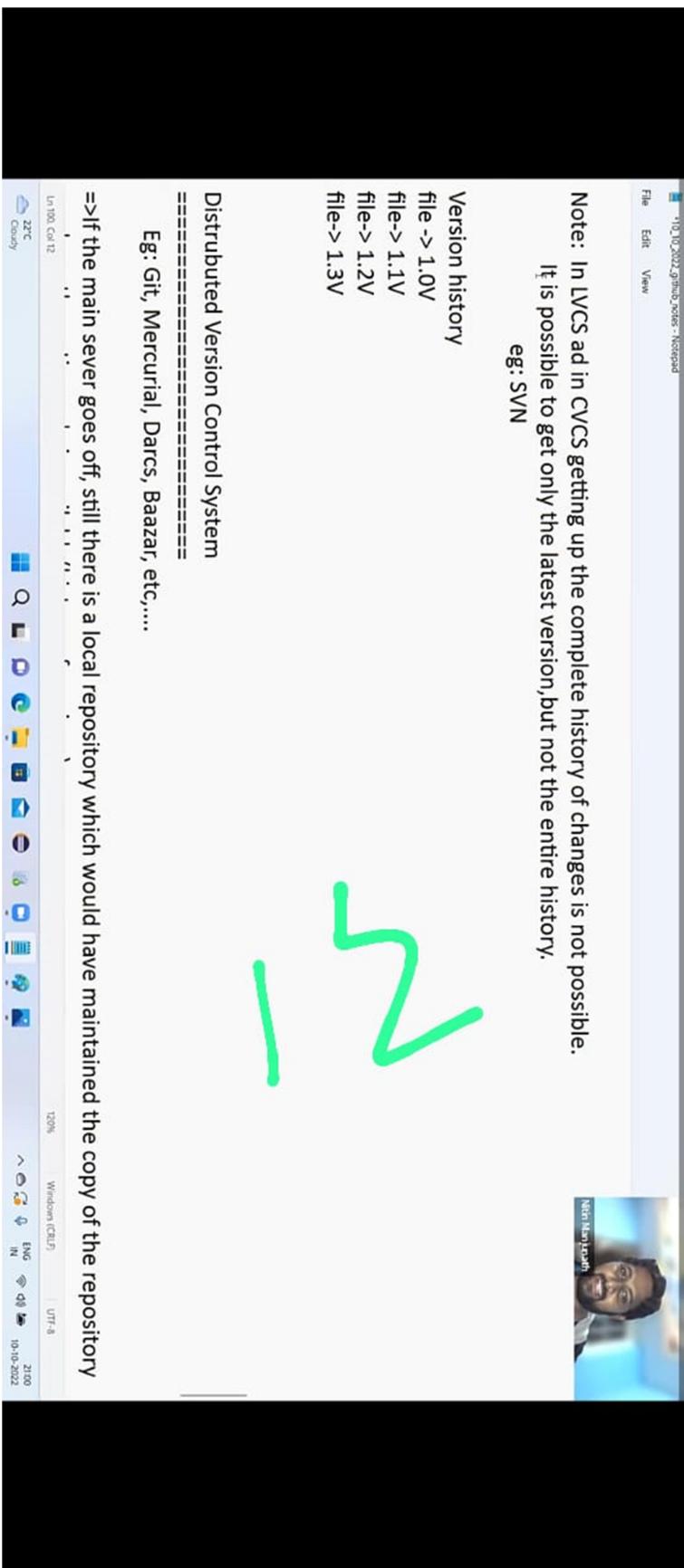
Note:

Checkout -> taking the code from repository to local machine.
push -> sending the code from local machine to repository(CVS)









Distributed Version Control System
=====

Eg: Git, Mercurial, Darcs, Bazaar, etc,....

=> If the main sever goes off, still there is a local repository which would have maintained the copy of the repository

File Edit View

Version history

file -> 1.0V

file-> 1.1V

file-> 1.2V

file-> 1.3V

Distributed Version Control System

=====

Eg: Git, Mercurial, Darcs, Baazar, etc,....

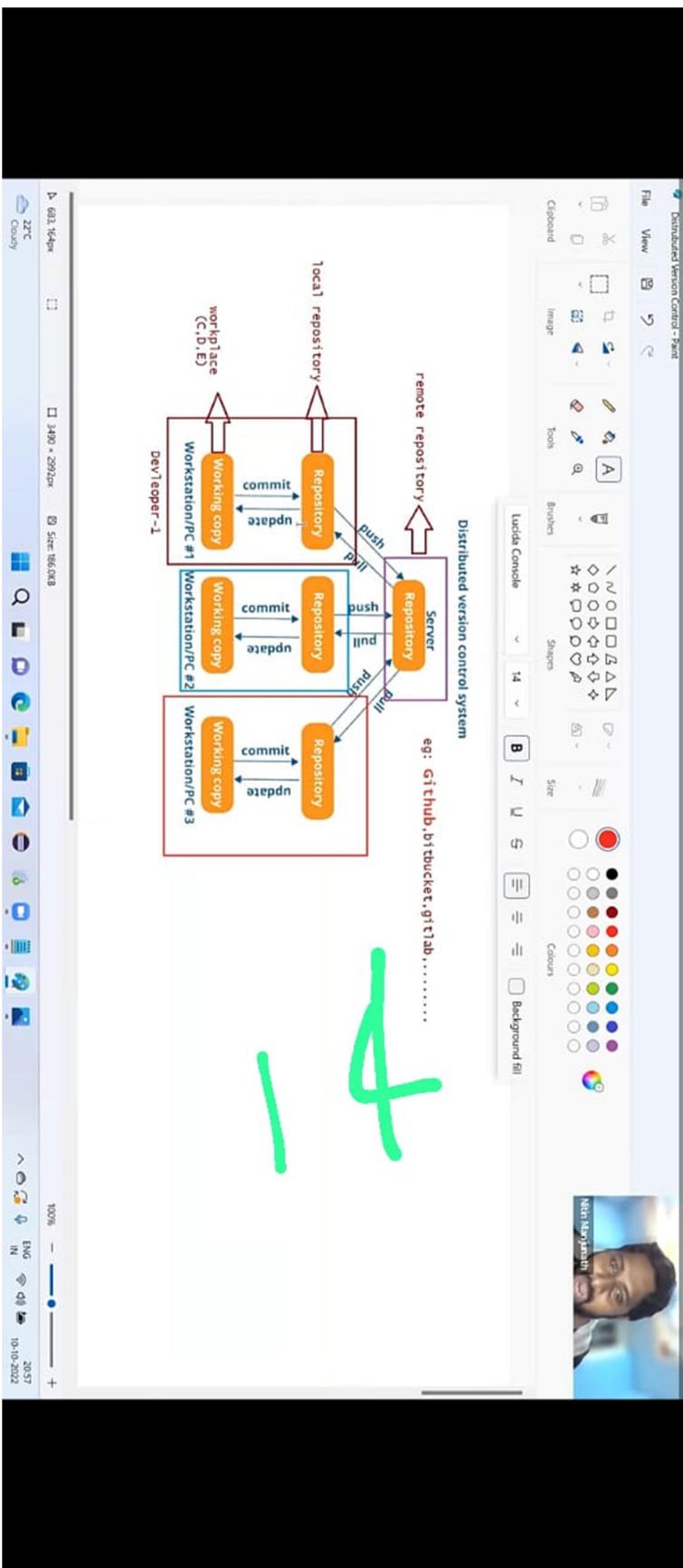
=> Developers will not only get the latest version but also the compile history of the files

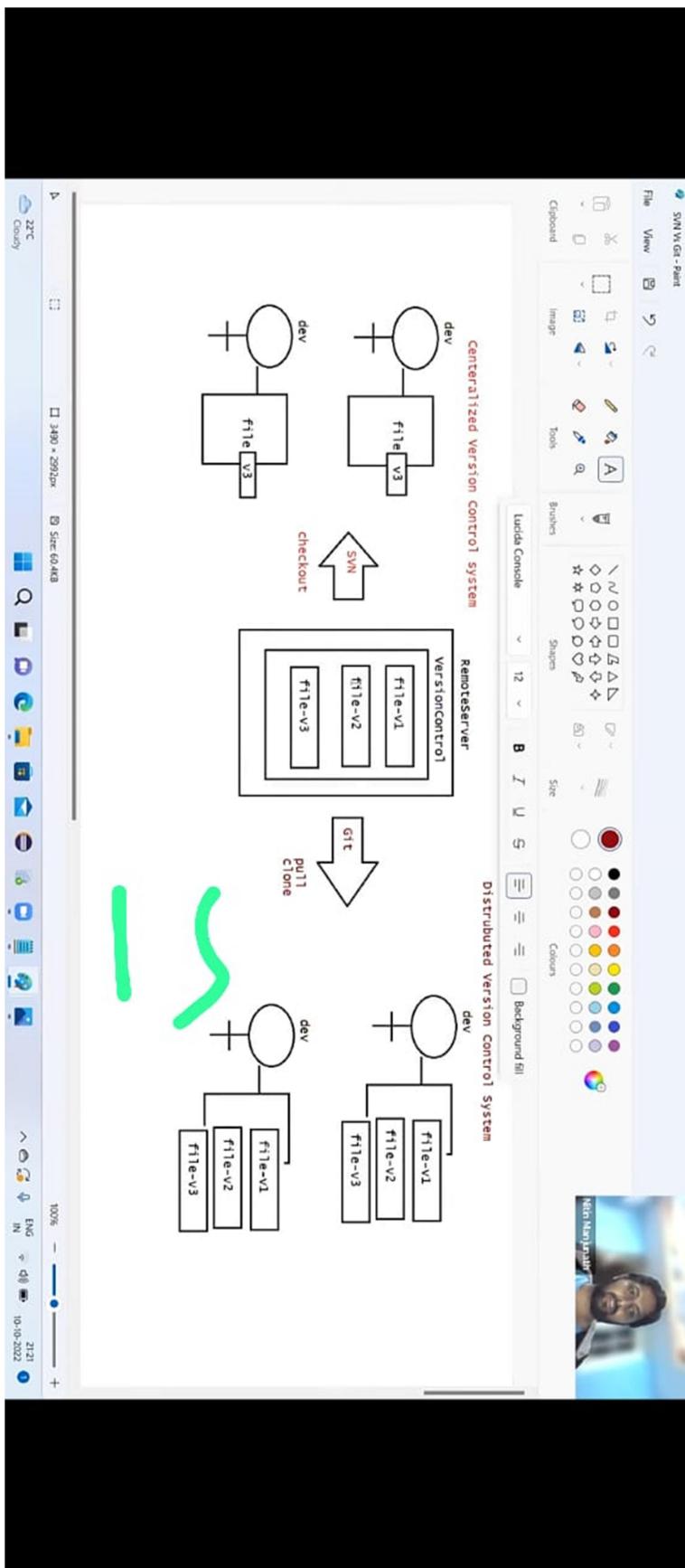
=> Push will not only happen with latest snapshot of the files rather they will push the old files also.

=> If the main server goes off, still there is a local repository which would have maintained the copy of the repository where the entire code is available(history of versions).

=> If the remote repository is down, then developer can do changes in the local repository and when the main repository is up the code can be pushed to remote repository from local repository.

13





192.168.2.9/mmc-zones - Home Page

Installation of git software

卷之三

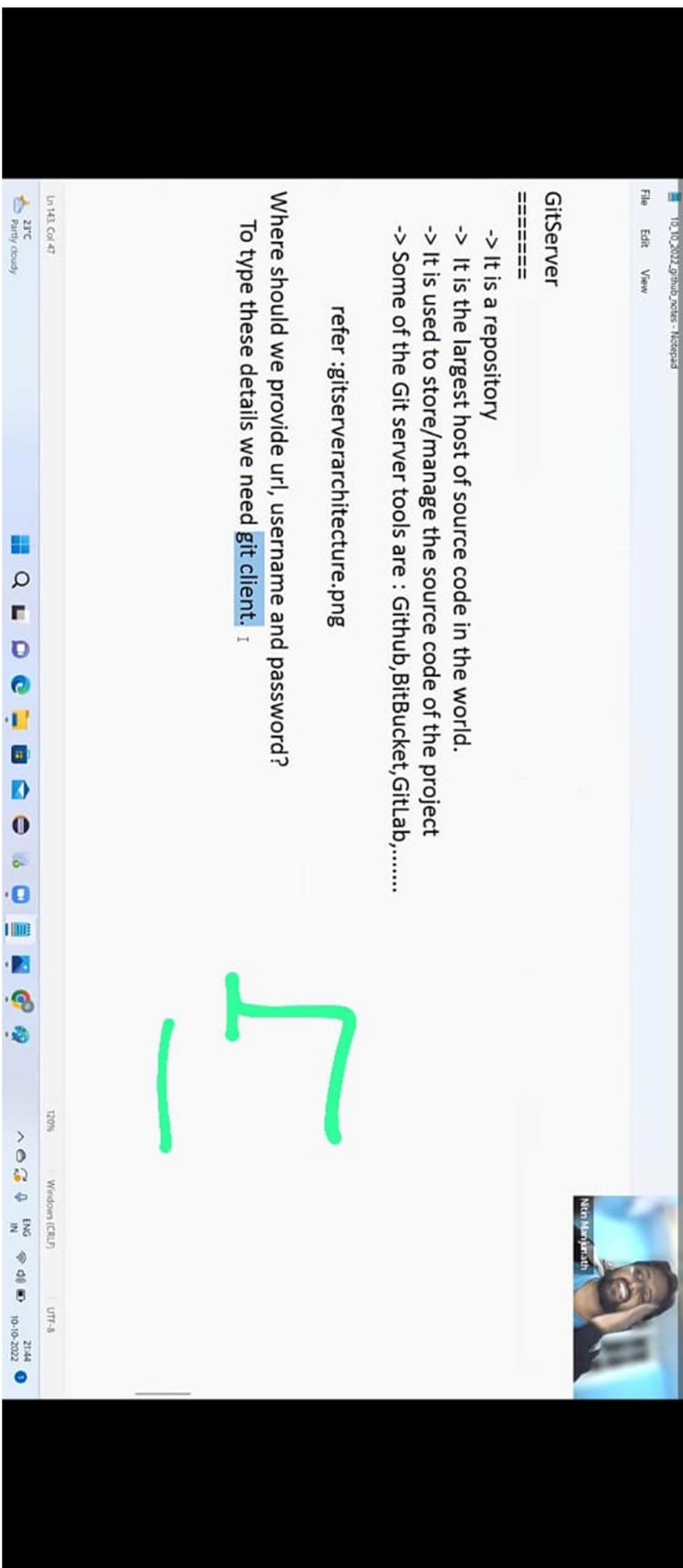
1. Download a git software from the following link
<https://git-scm.com/download/win>

There are 2 types of Git software

1. Git Server
2. Git Client

GitServer

16



Where should we provide url, username and password?

To type these details we need **git client**.

18

infosys

mindtree

wipro

citibank

cards

payment

offers

loans

tcs

Q> How to connect to github?

url -> <http://repo.citibank:9999>

url ->

username ->

password ->

git url will be same for all the developers but username and password will different for all the developers

DEV1: <http://repo.citibank:9999/projects/cards>
 username :initin
 password :xxxxxx

DEV2:<http://repo.citibank:9999/projects/payment>
 username :haider
 password :xxxxxx

Note: when we join a company team leader or manager will share the url username,password Every developer will connect to gitserver and get source code from the git server and do the changes locally and then move the code from the local repository to the main repository with the versions.

git server physical location where it is installed can't be seen.it would be installed on the cloud platform like AWS, Azuer or on any datacenters.

GitServer(Github,Gitlab)	
Cards (sourcecode)	Payment (sourcecode)
Offers (sourcecode)	Loans (sourcecode)

