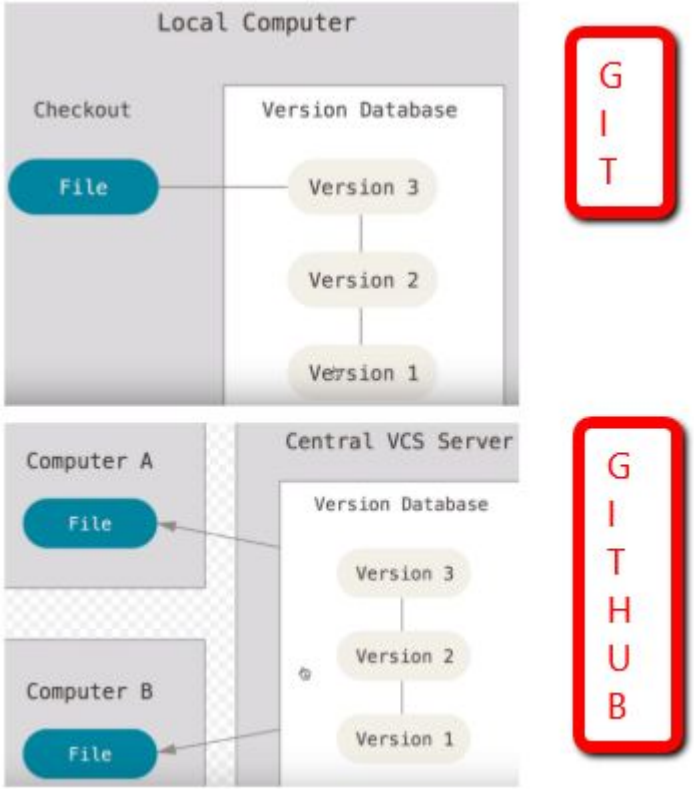
Git and GitHub

Git and GitHub

We will Learn -

- What is GIT
  - GIT is a Version Control System (VCS)
  - To Track changes in files / folders
  - To collaborate within the team
  - Centralized vs Distributed VCS
  - GIT is DVCS
  - Free and Open source system
- What is GITHUB
  - Website to upload your repositories online
  - Provides backup
  - Provides visual interface to your repo
  - It makes collaboration easier
- Is GIT related to GITHUB
  - No (GIT != GITHUB)
- A Simple Workflow
  - Next slide



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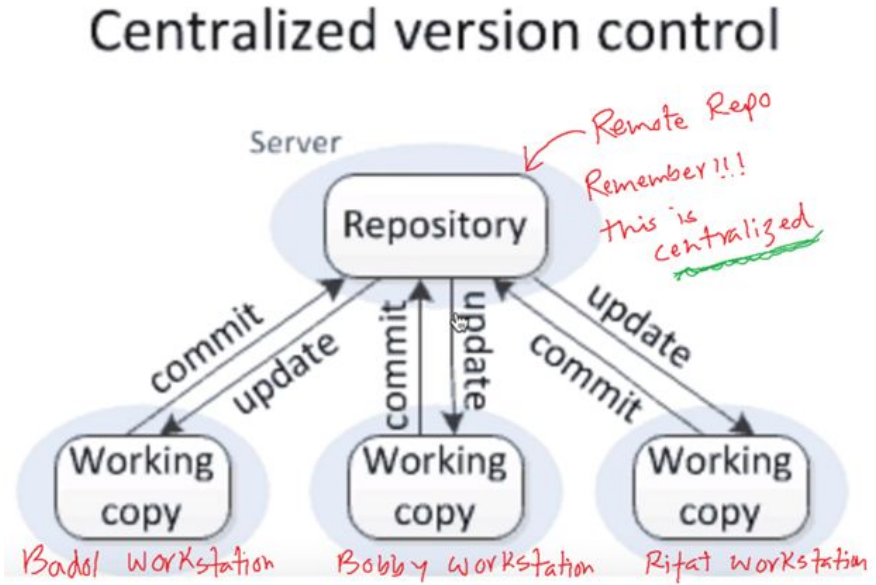

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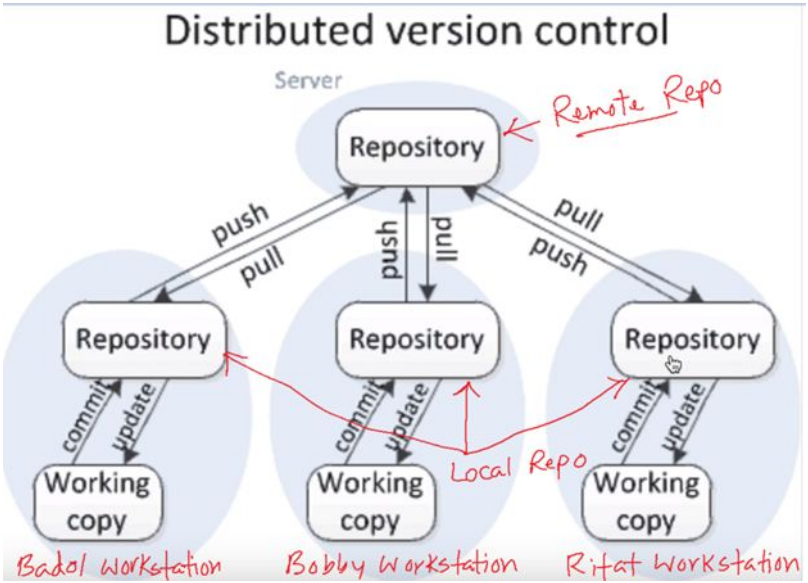

1. Always have backup for remote repo
2. Able to work on off line for DVCS

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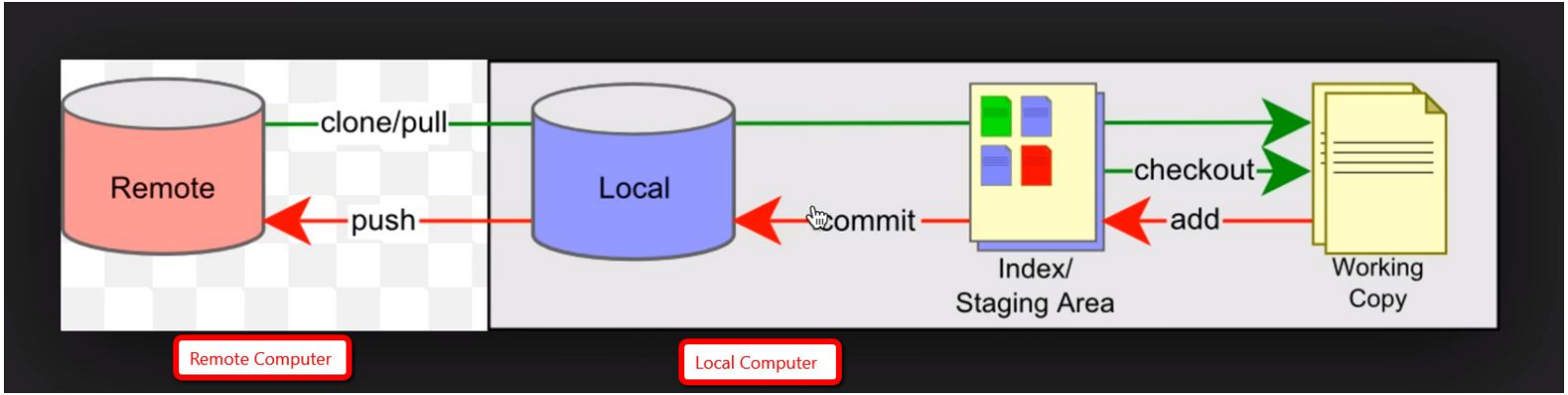


Steps

1. Checkout from remote server to local
2. view how many branches are there
3. Now checkout any single branch so that you can work on this
4. Work on offline put it this branch into your local by COMMIT
5. Push local repo to remote repo (PUSH)

Git and GitHub

We will learn -

1. Download and install git
2. Signup and create a account on GitHub
3. Add a file/folder to git
4. Track and commit changes
5. Add the repository on github

How to install -

- Go to www.git-scm.com
- Go to www.github.com
-

Install Git

How to install GIT —

1. Check if GIT is already installed
   - open command line
   - git --version (if no Git, then command not found)
   - Download & install GIT. => www.GIT-SCM.com
   - Double click & follow the prompt.
   - Now go to command line again & type "git --version"

Signup and create GitHub Account

Steps to signup GitHub—

1. Go to github.com
2. Click "Signup"
3. Select username with your email id & click "Create Account"
4. Click Sign in
5. Now add your github email & username to GIT
6. Go to next slide

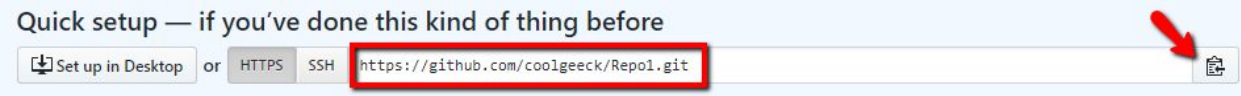
Add GitHub username and email to git

Step 1. Open command line
Step 2. git config --global user.email “coolgeeck@gmail.com” with quotation
Step 3. git config --global user.email “coolgeeck” with quotation
Step 4. Add your files / folders to git - for tracking the changes (now actual git starts here)

- Go to git folder inside the QA Automation folder and create another folder named delwar_folder
- Now I want to monitor all the changes on this folder delwar_folder to git
- Go to command line and get into this folder => cd C:\qa_automation\git\delwar_folder
- Type git init + enter and delwar_folder will initialized. It is added hidden folder called .git and we cannot see it because we cannot see hidden folder typically.
- Now type git status angit d enter. You may see nothing to commit as there is no change in your folder (may be)
- Now type echo. > delwar_test.txt and enter to add that file. (on linux/mac it would touch delwar_test.txt)
- Now type git status and you will see a untracked file added in that folder (**Remember**. GIT is tracking this folder now)
- Now type git add delwar_test.txt to add that file in git so that it can be tracked
- Now type git status + enter and it is green and it is tracked but not been committed yet.
- Now git commit -m “Delwar just added delwar_text.txt” file
- Now type git status and you will see nothing to commit
- Now make some changes in the file (delwar_test.txt)=> “This is my first changes”
- And also add another file (index.html) by echo. > index.html
- Type git status to see what is the status and you will see first file modified and 2nd file added in Red color
- Now type git add *.txt to add all the files with same extension or git add *.* for everything to add all the files with same extension or you just type git add . which will add everything in that particular folder
- Type git status and everything will be green
- Now type git commit -m “added index.html and modified delwar_test.txt”
- Finally type git status and you will see nothing to commit
- Let me know what could we learn till now.

Create remote repo and add all of our files in that box

Steps to create new repo in Remote box -
Step 1. Login to your github account
Step 2. Click '+' sign (top/right corner and select 'New repository'=> Repo1 by selecting Public and click 'Create Repository'



Step 3. Click copy button and go to command line and type git remote add origin +paste the copied link + enter and it has been added but …..

Step 4. If you go to github and go to your repository => https://github.com/coolgeeck/Repo1 and you won't see the changes yet as we did not push the changes.
Step 5. On command line type git push -u origin master (here master is the main branch by default) and you will see something is getting added.
Step 6. Now go to github.com and refresh the page and you will see all the changes is there. Also you will see the username under github
Step 7. Type git log and you will see all the details whatever you have done so far.
Step 8. Type git --help and you will see all the options for git command

Git Commands

```
git init
git status
echo. > delwar_test.txt (linux => touch
delwar_test.txt)
git add delwar_test.txt
git commit -m “Delwar just added
delwar_text.txt”
git add *.txt
git add *.*
git add .
git remote add origin + (Here github repo
address)
git push -u origin master

git log
git --help
```

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