git online training

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To set the user name and email id

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git init----------to initiate the

git config --global user.name "demo" -------to set the user name

git config --global user.email "demo@gmail.com" ------>to set the email id

git config --list ------>to see config list

ls -a------------>to see hidden files

touch file1------>to create a file

git status-------->to check status of file

git add file name---------->move file work space to staging area

git status--------->

git commit -m "label"--------->move files staging area to local repository

git log-------->to check status of file in local repository

git show commit id ---------->to show list of commited files

How install git in linux

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yum install git

how to add multifiles

---------------------

git add \*/./-A ------>to move multiple files in to staging area

git commit -m label file name ------>to commit single file into local repository

how to reset file its available in staging area

-----------------------------------------------

git reset head file name -----to reset file to move file from staging to workplace

how to reset file from local repo to staging area

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git reset --soft commitid -------->move file from local repo to staging area

how to move file from local repo to work space

----------------------------------------------

git reset --mixed commitid ------------->to move file from local repo to workspace

git show commitid -------> to show files in local repo

how to create git hub account

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open the browser

goto url https://github.com

click on signup

give user name email id password

and click on create account

select public it is free ---->any one can access for read

private we can give access

how to create repository

------------------------

give repository name

description

select public

select the initialize readme

git clone path ----------->to download from central repo to workspace

how to push the files into centralise repo

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git push ----------->to move files into centralise repo

how to show only 7show id

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git log --oneline -------->to see only 7characters in commitid

git log -n 2 ----->to see only 2 logs

how to check author logs

-----------------------

git log --author=authorname -------->to see particular author name

git log --since-year-month ----->to see logs in particulr dates

difference between svn and git

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svn

----

\*it is a centralised repo....directly we are interect with the centralised repository and we are doing work

\*if we any network fail we cant do our work

\*directly we are interect with centralise repo

GIT

----

\*it is a distributed repo.....we are first we do our work in our local system after we are push the code

\*when we will push the code on that time we require network

\*open source

\*fast and secure

\*git ---->software

\*github ----->centralised repo

3 phases in repo

1.workspace

2.staging/index area

3.local repo

\*

git init --bare --shared ------->to creat centralised repo

git push path of central repo master

svn

------

\*subversion

\*

master ------>branch name by default branch name is master

uses for branches

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we can create n num branches

git branch ------->to check list of branches

git branch new branchname ----->to create new branch

git checkout branchname ------->to change branch name

how to create files

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1.touch file name----------->to create empty file

2.cat > file name ----->to create append ,add data and read data

ctrl+d to save the file

cat file name ------to read file

3.vi file name --------->

how to remove branch

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git branch -d branchname ------to remove branch

how to create and checkout into that branch in single

-----------------------------------------------------

git checkout -b master-2 ------>to create new branch and checkout

how to give repository access to others

----------------------------------------

go to git hub

click on repo

click on settings

click on callobrators

git pull ------>to get file

Git Merge vs. Rebase

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they combine multiple branches into one,those two methods achieve it in different ways

git merge --squesh branchname -------->its combine last commit changes

git merge branchname ------>to mix one branch content to another

git rebase branchname ------>to mix two branches total commits

Backing out changes

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undo uncommited change

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git checkout --filename ------>its discards changes in the file uncommited

git checkout --. ----->to undo multiple changes in uncommited

undo commited change

--------------------

git revert commitid -------to undo for commited changes

git revert -n commitid ------>to undo changes but we have to explacitly do commit

git reset -----to reset the changes wat we hv to done

-----------------------------------------------------

git reset --hard commitid ------>its use to go previous changes

Renaming and moving files &Deleting Files

-------------------------------------------

git mv file1name file2name ----->changing file1name into file2name renaming

how to move files

------------------

git mv pudding.txt lovenotes/patty.txt ------>moving pudding.txt file into lovenotes directory and renaming has a patty.txt

after that we hv to check status and commit the changes

how to delete the files

------------------------

git rm filename ----->to delete the file

after that we hv to commit the changes

Git Repository Set up

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go to desktop and create folder

go to folder and type git init

git init -------->to initialise empty repo

Git push pull and fetch

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git push ----->to push files into central repository

git pull ------>to pull files from central repo to workspace

git fetch ------>to fetch the

git fetch origin ------>to fetch the new branch it is created in central repo to workfile

after that we hv to switch the branch

git fetch origin branchname:branchname ----->to fetch specific branch

git fetch <remote>----->Fetch all of the branches from the repository

git fetch <remote> <branch> ------>only fetch the specified branch.

git fetch --all ---------->A power move which fetches all registered remotes and their branches:

git fetch --dry-run ------->The --dry-run option will perform a demo run of the command.

git stash----->one temporary area to store tem files

---------

wat are the conditions to store the files in to stash area

---------------------------------------------------------

1.the files must and should in the cache/staging area

wat are the commands use to store the data in the stash

---------------------------------------------------------

git stash save <message>----to move file into stash area

how to stash list

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git stash list ----->to see stash list

stash@{0}:<branch name><message> ----->this is the format

wat are the commands use to copy the data into branches

-------------------------------------------------------

1.git stash apply <stash#> ------>copy and paste file from stash area to branch

2.git stash pop <stash#> ------->cut and paste file from stash area to branch

how to delete the stash area

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git stash drop<stash#> ---->delete the particular area

git stash clear ----->delete the entire stash list

git stash save <message>

git stash list ------>

git stash show -p <stash-id>

git stash drop <stash id>

git conflicts---->git conflicts is a pbm that 2 developers changed same file that pull from central repo after that they are

changed the file and they are trying to commit the file on that time we will get error for git conflict

-------------------------------------------------------------------------------------------------------

when dev1 is already changed the file and he is pushed in to cen repo the same file is changed by the dev2 and he is trying to push but he will get pbm

how to resolve the pbm

-------------------

the dev2 first have to do

1.git pull --rebase origin master ---->to pull changes the dev1 is made

2.git status ---->to see the conflict file

3.git mergetool ---->to see merged tools

then we will see all changed files after that he can decide to keep changes are not

and save that file and exit

4.git rebase --continue ----->to apply changes

git push origin master ----->to push into cen repo

git tags ----->this is use to mark some release points

-------------------------------------------------------

1.to mark release points for your code/data

2.when u want to create a historic point for your code/data that you can refer at any feature time

steps to create tags in git

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1.checkout the branch where youwant to create the tag

git checkout <branch name>

2.create tag with some name

git tag <tag name>---->to create tag

git tag -a v1.1 -m "tag for release ver 1.1"------->to create ennotate tag its containe all details about tag

3.Display or show tags

git tag----->to see the list of tags

git show <tag name> ----->to see the tag independently in detail

git tag -l "v1." ----->it will shows all tags releted to v1

4.how to push tags to remote

git push origin v1.0 -----to push the individual tags

git push origin --tags ---->to push all tags

git push --tags ------>to push all tags

To delete tags

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git tag -d <tag name> ----->to delete tag

git tag --delete v1.0 ----->to delete tag

to delete tags from central repo

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git push origin -d v1.0 ----->to delete tag for central repo

git push origin --delete v1.0

git push origin :v1.0

git push origin -d v1.0 v1.1 ----->to delete multiple tags at a time

we can create a branch from a teg and checkout the branch

------------------------------------------------------------

git checkout -b <branch name> <tag name> ----->we can checkout branch and creates the tag for that branch

how to create a tag for past commit

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git tag <tag name> <reference of commit> ----->to create a tag for past commit

git --version ------>to check git version

DOCKER----container tool

---------

virtulization

vios(virtual input output server)/hypervisor----->it is use to create servers based on requirments

docker

-------

it is a container service , we can easily move the services,its containe images and applications

how to install docker in windows

--------------------------------

goto browser search for docker toolbox

click on first link and download docker toolbox for windows

and install docker file for downloaded

click on docker quick install

after that check for docker version ----->docker --version

images------>it is a file

----------

how to set images

-----------------

docker images ------>to check the images

docker search <imagename>----->to search image using its name

how to pull images from docker

-----------------------------

docker pull <imagename> --------->to pull image from docker to local machine

how to download images from docker hub

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ex:centos

first we have to search for images using command

docker search centos ----->to search the centos image in docker after that we have to download that image

docker pull centos ------>to pull r download image

docker run -it centos ----->to run the particular container ex centos here

hostname ------>to check the host name

currently we are in centos os in this os we can install any software wat we want

for ex git we want to install --->yum git

exit ------>to comeout from centos

docker ps ------>to see only running containers

docker ps -a ------>to see all containers including running and non running and also display container details

exit or ctrl+d used to exit from container

docker run -itd <container name> ------>to enter in to a container in detached mode here we are not entering into that container just we are starting the

container

how to enter detached container

---------------------------------

docker attach <containerid> ----->to enter the particular detached container

ctrl+p+q ------>to exit container without stop the container (to keep container in up)

docker stop <container id>------>to stop the container from forcefully

docker start <containerid> ----->to start the stoped container

docker start containerid ---->to start container

docker stop containerid ------>to stop the container

docker attch cid -------->to enter in to container

how to delete images

--------------------

docker images ----->to list out image list

docker rmi imagename ------>to delete images

docker rmi -f imagename ------>to delete images forcefully

after that pull the centos

and check the ifconfig

it will give error because we have to download net tools

so give yum update command

so it will update

hostname -I ----->it is alternative way to check ip address

how to delete container

------------------------

first we have to stop container using docker stop cid

docker rm containerid ------->to delete containers

docker rm -f containerid ----->to remove running containers

Docker network ip address configurations

-----------------------------------------

docker network ls --------->to check network list

ifconfig ------>to check ip address in system

docker network inspect <network name> ----->to see full details of network

cidr block

man docker-network-create ----->man is used to check details about one particular thing

docker network create --subnet 10.1.0.0/24 --gateway 10.1.0.1 mybridge-1 ---->To create a network with the name mybridge-1 with the ip address

10.1.0.1

docker network rm <network name> ------->to remove network bridge

ifconfig ---->to see all ip configurations

docker network create --subnet 10.1.0.0/16 --gateway 10.1.0.1 --ip-range=10.1.3.0/24 --driver=bridge --label=myownnetwork bridge01 ---->to create network with name bridge1

docker network inspect bridge01

docker images

docker run -it centos

docker run -it --name 1centos --net bridge01 centos ----> To set our own network ip address in to centos

after that check ip address

hostname -I ------->it will shows ip address of created bridge01 ip address in to centos

how to set particular ip address in to container assign ip address in to container

---------------------------------------------------------------------------------

docker run -it --name centos-12 --net bridge01 --ip 10.1.3.25 centos ----->to set own ip address (10.1.3.25)to particular container

-------------------------------------------------------------------------

docker run -it --name centos-12 --net bridge01 centos ------>to create ip address by default

hostname -I

exit

docker run -it --name centos-12 --net bridge01 --ip 10.1.3.25 centos ------>to create our own ip address

ifconfig

incase we get any error

yum update

yum install net-tools

ifconfig

docker inspect cid

----------------------------------------------------------------------------------

Docker Linking------->to link application in to database

-----------------------------------------------------------

docker pull wordpress

docker pull mysql

docker run -itd --name wp1 -p 89:80 wordpress

iptables -r or iptables -h

docker run -itd --name mydb -e MYSQL\_ROOT\_PASSWORD=12345 mysql

docker run -itd --name db-word --link mydb:mysql -p 78:80 wordpress -------->to link the both sql and wordpress

how to start docker

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systemctl docker enable --------->to start docker permanently

service docker start -------->to start docker

docker exec -it <container id> /bin/bash ------>alternative way to enter in to container

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docker run -itd centos

docker ps

docker exec -it cid /bin/bash

exit

but after that also container is in up only

How to create docker hub account

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go to docker hub and sign up with credintials

and create repository

first we have to create docker file

image have only read permission

container have full permission

docker login ------>to login into docker hub

docker logout ----->to logout from docker hub

after login

create a container

and install git and some application

and create some files and directories

ctrlpq

docker commit <containerid> --------->to create image

docker images

docker tag <imageid> <name of image> ----->to give name to that image

goto docker hub account and create repository

and go to server and change name of the image same as organisationname

docker push <imagename> ------>to push image into docker hub repo

after that go to docker hub click on tag

how to delete container and images

----------------------------------

first we have to stop all containers

docker ps

docker stop cid

docker stop cid cid ------->to stop multiple containers

docker start cid ------>to start particular container

docker ps

after that we can use docker attach or exec

to delete container

----------------------

docker rm cid ----->to delete container

docker rm -f cid ---->to delete container forcefully(running container)

docker ps -aq ----->to show only container ids

docker rm $(docker ps -aq) ----->to remove all containers

how to delete images

----------------------

docker rmi <image name> ----->to delete images

docker images -q ----->to list only image ids

JENKINS(CI-CD)

--------------------------------------------------

continous integration and continous delivery

job ---->flow work

implemented by sun micro systems the person is hudson

they will send into oracle

installation of jenkins in windows

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download jenkins.exe

1.download jenkins.war

2.jenkins.war---->application server

3.After that copy files and paste into new folder

4.extract the file jenkins-2.161.zip and install jenkins-2.161

5.jenkins will start in browser and copy the password from c:prgm files(86)/jenkins/secrete/initial password

6.install suggest plugins

we can run java -jar jenkins.war run in cmd jenkins will start

in case we deploy jenkins.war file in application server(tomcat) then also it will start

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plugins explaination

1.timestamp ----->it is for see timing of build

2.work space cleanup plugin

3.gradle

4.pipeline view

-------------------------------------

how we can start jenkins

------------------------

go to jenkins war file location and open cmd

then run java -jar jenkins.war

then it will open jenkins in default port id that is 8080

java -jar jenkins.war --httpPort-8085 ----->to open jenkins in 8085 port id this is the command to use open jenkins in particular port

after installing plugins

create as first admin user ---->we can create user here it is continue as a admin

and start the user

how to change users password in jenkins

---------------------------------------

1.click on manage jenkins

2.click manage users

3.change password and user name if u want and save

options explaination in jenkins

--------------------------------

enable auto refresh------>it will enable this option means automatically refresh the jenkins for every 15 seconds

add description ----->we can used this option to give the description

new item ----->used to create new job

people---->to see users list

build history ---->to see history of build jobs

my views ----->to view job views

credientials ---->to save credientials of plugins ex :github

new view ---->to define the num of jobs into project view

build executie status ----->

how to change port number in jenkins

------------------------------------

goto jenkins home folder

goo c:pgm files(86)/jenkins/jenkins.xml open file

in this file change port number in 41 line change port number and save it

then reboot jenkins

how to reboot jenkins

---------------------

first way ---> click services in windows search

open services

then goto jenkins and restart the jenkins

second way--->in browser restart the jenkins ---->localhost:8080/restart and run

in restart we hv two options

1.restart ----->it will terminte all running jobs

2.safeRestart ---->it will waite upto complete running jobs after it start

how to start jenkins in tomcat

-----------------------------------

1.goto tomcat port in browser

2.login

3.copy file executible file in jenkins

4.goto tomcat server paste it into webapps folder in tomcat

5.and refresh the tomcat and start the jenkins and ctrl click in jenkins it will start the jenkins

different ways to start jenkins

--------------------------------

1.run jenkins.exe file

2.jenkins.war ----->java -jar jenkins.war (it will be run in cmd or in linux machine)

3.jenkins.war ----->application server(tomcat)

manage jenkins options

-------------------------

configure system---->to check build executer status that is nodes and jenkins tools and jenkins info

configure global security ----->to change type of security

configure credientials ----->we can configure this one when we create jobs

global tool configuration ----->it is used to set tools configurations

gradle ---->it is a build tool

reload configuration from disk ----->to reload jenkins from .jenkins file (it is used to take backup)

plugin ----->mange plugin

1.update

2.available

3.installed

4.advanced

system information :all things about system information releted to plugins

load statistics:graphical mode of jobs and executers in load

genkins cli --->genkins in command line interface mode

script console---->it will use only admin here we can use ruby language to do troubleshoot

manage nodes---->

about jenkins ---->it is all about jenkins information

manage old data ---> here store all old data about jenkins

install as windows service --->

manage users ----->to create users and manage users and delete

prepare for shutdown ----->this is tp give notification for other users

how to create jobs:

-------------------

1.click on new item

2.give on name

3.select project and click on ok

how to deploy code in tomcat

---------------------------------

1.create job in jenkins

2.goto git hub and copy path and give credientials

3.select poll scm

4.in build goals options package

5.post build actions ---->war file or ear contain

how to plugin war r ear

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search deploy to container

and install plugin

6.in post build actions select war r ear file

7.\*\*/\*.war

8.context path ---->executable file name pom.xml

9.containers select tomcat

and add credientials and give the url of tomcat