Git Quiz 8 Abhinav Ponnala

1)What is Git ?

Ans:Git allows a team of people to work together, all using the same files.

And it helps the team cope with the confusion that tends to happen when multiple people are editing the same files.

There are many ways it can be set up and configured, but at my job, here's how we use it: when a new employee starts,

he downloads all the files from Github, which is an online server we're all connected to.

Git is a Version control system.

To maintain the configuration data and to collaborate with the team to identify the number of releases,resources required,Dependencies and release schedule.

We can secure the code in one repository.

2) In what form is Git being used in your Company ?

Ans: By command line

To maintain the code in the central repository and integrate with the automation tools to automate build and deployment.

Different companies use git in different forms, some use, GitHub, some use pure Git on a central server with GitWeb to view repositories in browser, some companies use GitLab

3) What are the different Tools that you integrated Git with in your company ?

Ans: Maven and Jenkin

4) What are Git hooks ?

Ans:Like many other Version Control Systems, Git has a way to fire off custom scripts when certain important actions occur.

There are two groups of these hooks: client-side and server-side. Client-side hooks are triggered by operations such as committing and merging,

while server-side hooks run on network operations such as receiving pushed commits. You can use these hooks for all sorts of reasons.

5) Give us an example of a Git Hook that you implemented?

Ans:You can use this hook to inspect the snapshot that is about to be committed. For example, you may want to run some automated tests that make sure the commit doesn’t break any existing functionality.

6) List all commands a developer uses to push to git starting from clean workspace ?

Ans:Git Clean.

Git Add file

Git Status.

Git Commit -m"message".

Git Status.

Git Log.

Git Push origin Master.

Git init

git clone url

git add to add the fles

git commit -m" "

git push

git push

7)Difference between Git push and Git pull

Ans: git pull runs git fetch with the given parameters and calls git merge to merge the retrieved branch heads into the current branch.

With --rebase, it runs git rebase instead of git merge.

copies all local commits and makes a merge there (the reverse of what git pull does); but in this case, the server does not have my local master branch,

so I can't see what is it merging

Should explain what is git push command doing and git pull doin there is no merger concept in git push and git pull?

git push is used to push the added files to the main repository and git pull is used to pull the files added into the repo by others or simply git pull puts your remote repo updated

8) Different between Git Rebase and git pull

Ans:: git rebase Called when rebasing a branch. Mainly used to halt the rebase if it is not desirable.

$ git pull

Downloads bookmark history and incorporates changes

9) How do you what branch you are currently on ?

Ans: git branch

10) How do you what other git branches exist on the git server ?

Ans: git branch

git branch -a

11) what is a git remote ?

Ans: it is the remote versions of repository

It is a management tool to record the remote repositories. It allows you to save long urls as short handles.so that we should not use long urls all the time. It is also used to add, change and delete them

12) How can you temporarily save changes before pulling/merging or switching branches?

Ans:git pull

git merge file

git pull # if needed

git push

git stash

13) difference between git branches and git tags ?

Ans:Lists existing branches, including remote branches if ‘-a’ is provided. Creates a new branch if a branch name is provided. Example: git branch -a \* master remotes/origin/master

git tag Tags a specific commit with a simple, human readable handle that never moves. Example: git tag -a v1.0 -m 'this is version 1.0 tag'

14) what are different types of git tags available ? give exact commands on how to create each type of tag ?

Ans: git tag

git tag v1.0.0 -m "final stable release"

git tag v2.0.0 -m "major bug"

Annotated tag: git tag -a v1

Lightweight tags :git tag v1

Tagged later :git log --pretty=one

shared tags: git push origin

15) what command do you use to merge two branches ? give example

Ans:git checkout master

git merge test

16) How do you know current state of your workspace to that on git server ?

Ans: git status

17) What command is used to fetch the latest updates by others?

Ans: git fetch

18) What command is used to create a git repo for your personal development?

Ans: git init

19) Explain the relationship between the working directory,

the index, the repository

Ans:The Git index is used as a staging area between your working directory and your repository.

You can use the index to build up a set of changes that you want to commit together.

When you create a commit,

what is committed is what is currently in the index, not what is in your working directory.

20) How can a Git merge fail? What do you do?

Ans:It happens when two branches have changed the same part of the same file, and then those branches are merged together.

We can resolve this conflict by doing git status and find where the conflict occured resolve it then merge the file.

21) what command do you use to know list of previous commits ?

Ans: git log

22) What is 3a525393f6a5c47fa08d91ef16c16927ed3cd33a? What are the benefits of this?

Ans:its called as SHA1 hash. Its a unique id.

benefits:

it can find if two objects are identical or not.

it can detect errors when it reads an object.

23) command to rename a file in Git?

Ans: git mv currentname newname

24) What git command is used to undo changes made to your local repo? What are the variations and how do they work?

Ans:git revert <commit>