Day 1 :

26/08/2023

SDLC : Software Development Life cycle

Water fall model

      Requirement gathering   6 months

      Plan

      Design

      Coding / testing

      Build the project   development mode

      Deploy the project   production mode

      Provide the service

Increment model

V model

Agile model

Sprint : time duration to develop small module 1 or 2 week.   Login page, feedback page

      Dashboard

DevOps :   Development and Operation

Development people develop the application using any language like java, python, etc

Operation team interact with customer or end user client and they are responsible to maintain the application.

Admin

Developer

Tester

Admin

Database designer

Architecture   etc

Git and git hub

Maven and Gradle (Java development)

CI and CD tool using Jenkin (Continuous Integration and Continuous deployment or delivery)

Selenium tool (testing)

Ansible tool (monitoring tool as well as configuration tool)

Docker container

Nagios tool

Kubernetes

Git and github

Sub version control which help to record the application flow.

Dev1   login page

Dev2   java or python code   merge the code

Dev3   database

Unix commands

ls : this command display all files and folder present in current directory

pwd : print working directory : it show current path of terminal or command prompt.

mkdir foldername: this command is use to create the folder

cd foldername   : move inside a folder

cd ..   : come outside a folder or move to parent directory of current folder

rmdir foldername : to remove folder

touch filename   : to create empty file

vi filename   : open the file in vi mode

                            once open hit i key to move inside a vi editor mode

                            write the contents

esc   : to come out from editor mode to normal mode

:wq   : write and q quite (save and exit)

cat filename   : it is use to read contents from a file

                       cat means concatenate

==Git==   : Git is version control system which help to track or record changes done in the application or project or app.

Git also known a distributed sub version control.

First create the folder

Then create the file and write the contents

==git --version==

==git init==   it is use to make local folder as git repository

                   init command create .git folder insider that current directory

==ls -a==   : it display all files and folder with hidden folder.

==git status== :   this command is use to check the current status of your repository

==git add filename==   : to add files or folder normal local folder to staging area.

Or

==git add .==   : this command is use to add all files and folder present in

                     Current directory.

==git commit -m "message"==   : this command use to pass the task from staging area to

                     local repository.

git config --global user.email "akash300383@gmail.com"

git config --global user.name "akash"

steps

1. Create folder with any name ie Demo
2. Then create the file with any name ie test and write the contents insider that file.
3. Then open the terminal inside that folder please use pwd
4. git init
5. git status
6. git add .
7. git status
8. git commit -m "message"
9. first time we need to set config details as emailed and name
10. git config --global user.email "akash300383@gmail.com"
11. git config --global user.name "akash"
12. Then please commit using command as git commit -m "done"
13. git status

git branch : branch is like a pointer which hold more than one commit details.

By default git provide default branch. Default branch name may be master or main.

If we want to check branch details present in local repository

git branch

command to create user defined branch

git branch branchname   this command is use to create user defined branch

git checkout branchname   this command is use to switch from one branch

to another branch.

Current branch is master or any other branch

git merge branchname   this command add all task in current branch

==git branch -D branchname==   this command is use to remove the branch

Demo.java

int a;   akash branch

int b;   Vikash branch

Remote repository help us to share the code between two or more than one tabme.

Git hub

Git lab

Bitbucket

Aws

Azure

Private cloud etc

==git hub :== it is a type of remote repository provided by micro soft organization.

We want to connect local repository with remote repository

1. Token base authentication
2. SSH Client
   More

   To connect local repository with remote repository

   git remote add origin URL

git remote add origin https://github.com/Kaleakash/test_rep.git

git remote add origin https://token@github.com/Kaleakash/test_rep.git

git push -u origin main (it is use to push the code)

how to resolve the conflict

1. first create Repo2 folder

2. then open terminal inside that folder

3. create sample file

4. add some data 1st, 2nd

5. using git init make folder as repository

6. git add .

7. git commit -m "done changes in master branch"

8. create the branch

9. git branch akash

10. git checkout akash

11. in akash branch we will add 3rd and 4th message.

12. Then git add .

13. Then git commit -m "in akash branch done some changes in sample file"

14. Create another branch with name as Vikash

15. git checkout -b Vikash (it will create the branch and switch to that branch)

16. in sample file in Vikash we will add the message as 5th and 6th.

17. Then git add .

18. Git commit -m "done change in sample file by Vikash branch"

19. Please move the master branch ie git chechout master.

20. Please verify current branch using command as git branch

21. Then in master branch merge the code from akash branch

22. Git merge akash

23. Using cat sample read the data from sample file

24. Out must be 1st, 2nd, 3rd, 4th

25.