

<http://www.google.com>

URL

req(http)-----→

Client

Server

←-----Res(http/https)

html/html5

Css/css3

JS(Javascript)

TS(TypeScript)

Angular framework

Cucumber (testing tool)

Frontend technologies

Java

Asp.net

Php

Python

Node js

Backend technologies

Java all topics (core Java)

Build tool : maven or gradle

JDBC : using java we can connect to database : mysql or oracle

Servlet : it is a java module which help to create java server side application.

**Servlet and JSP** to create backend technologies using java.

**Mongo db** : JSON (Java Script object notation) : to store the data in json format we can use

Mongo db (key-value).

Frontend                      ←-----connection       -----→                      backend

html    **Servlet-jsp:** to create backend technologies

css    **Jdbc** -→ to connect database

js    Mysql or mongo db

ts

angular

or

**spring framework or spring boot**

**orm or spring data**

mysql    or mongo db

development : we are creating the application using some technologies.

deployment phase

devops :                      git, maven or gradle, docker, jenkins , overview of AWS

**Git** : git is distributed version control tool which is use to **record** the flow the application.

Create a folder with name as Repo

Inside a folder create any file ie sample with simple message.

Then open the terminal inside that folder

Then check **git --version**

**git init**    to make that folder as local repository

**git status**    this command is use to check the status of local repository

**git add filename**    to add the file from local machine to staging area

**git commit -m "message"**    to add the file from staging are to git local repository

if we execute this command at first time it will ask to set email and name details

**git config --global user.email "[akash300383@gmail.com](mailto:akash300383@gmail.com)"**

**git config --global username "akash"**

modified same file or create new file

then check the status

`git add .` this command add all files and folder to staging area

`git commit -m "message"`

`git status`

`git branch :`

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

`git branch` : this command is use to check all branch details present in local repository.

By default one branch provided by git with name may be `master or main`

To create user defined branch

`git branch branchname`

then check all the branches present in local repository

`git branch branchname` this command is use to create the branch

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

first create the branch with any name like Akash

git checkout akash                      to move from master to Akash

then do some task like create file and add some contents inside that file

git add .

git commit -m "created new file"

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then move to master branch

then create another branch like Vikash

git checkout Vikash

then do some task like delete the file

git add .

git commit -m "file deleted"

**git branch -D branchname**              this command is use to delete the branch

## **remote repository**

using remote repository we can share the code between more than one team.

Github

Bitbucket

Gitlab

AWS (code commit)

Azure

Or private repository

**git branch -M main**                      : this command is use to rename the branch

`git remote add origin URL` : this command is use to link local repository to remote repository  
`git remote add origin https://github.com/Kaleakash/caltech_Java_Aug_2023_batch.git`  
`git remote add origin https://token@github.com/username/repository`

`git push -u origin main`

if you added wrong url or without token or any error

please remove url using command as

`git remote rm origin`

then repeat same steps once again that is

`git remote add origin https://token@github.com/username/repository`

`git push -u origin main`

we need to generate the token