**Branching Strategy of GIT**

**What is Branch:-**

Branching means it’s a separation

**Why branching:-**

Primary goal of any organization is customer/client get releases/new features on time means every 2 3 months and make them happy and releases new changes frequently

It’s better for planning and implementation that’s why we need branching strategy.

**Ex:-**

Here we are taking one example of **calculator** application

First we are release the application only with the addition, multiplication, subtraction, division functionality in version1.

Now we want to add the some advance functionality like percentage and some advance functionality in version 2

In such cases making changes in main or master branch we are creating the new branch lets its v2 branch and feature branch and we are

Start the development of our application after completing the code first test the new code weather its working properly or not when its ok then we are delivering the old as well as the new functionality

When we are creating the branch make sure that the it’s not affect the existing functionality

Preprod

Master/Main

Release

Hotfix

Live Application

V2

Testing

Feature

Buttons/setting

V1

UI

Hotfix

Features add/sub

Development

Hotfix

Feature

Mult/divide

We are working on calculator and we are started developing with calculator branch with some fixes we starting working and doing changes and committing it there are 2 to 3 developers

Here we are create new features branches when it’s completed and testing done then it merge it in to the main or master branch

Similarly no of people working for that we are creating the no of feature branches

for any new changes we create the feature branch and after completing the things also deleting it

Release branch:-

we build application from release branches instead of build on master and main

we are tested application successfully and we want to deliver the application to customer we use release branch.

why we not use master because it is used for active development who actively doing changes we are not directly delivering application form master to customer

Because first we want to test it and make sure that weather its working fine or not when it’s ok then push code into the release branch

Again same process doing again and again some changes work in progress. Then again create the new features testing and release branch

**Hotfix**

Branches is quick changes it in one day or two days

when we are doing the changes in hotfix the code will deliver into release as well as the master branch because finally code want to go into release and live the application to the customer