* Eclipse memory Analyzer Tool can identify inefficiencies in your application
 - As well as show you the wider memory usage for code.

## GIT Interview questions

* What is Git?

* Git is a distributed version control system.
* it lets you track changes make profile and allows you to revert back to any particular change that you wish to
* It is a distributed architecture that provides many advantages over other version control sysystems like svn
* one of the major advantage is doesnot relay on Centeral server to store all the versions of a project files
* There is one central server to store a project file and all its versions you could see.
* programer can maintain a local repository which is actually commit and update the local repository with out any hassels

* Difference between Git and svn?
→ git is a decentralised version control tool
 svn is centralized version control tool
→ git belongs to 3rd generation of version control tools
 svn belongs to ~~2~~2nd generation of version control tool
→ git commits are possible even you are offline
 svn commits are possible only online

→ In git push and pull are faster
In SVN push and pull are Slower

* Difference between Git and Github ?

→ Git is a version Control System of distributed nature that is used to track source code changes during Software development

→ Github provides hosting for software development version Control using Git
It offers all of the distributed version Control and Source code management (SCM) functionality of Git as well as adding its own features

* ~~mention~~ mention various Git repository hosting functions.
- Github
- Gitlab
- Bitbucket
- Source Forge
- Git Enterprise

* git Commit
→ git commit <option> "message"

* Basic git Commands
git init → is used to create new local repository
git Status → list the files that was changed those to add
git Clone <url>
git add
git Command
git push origin master :

* How to fix a broken Commit?

→ use the command "git commit --amend"
we can fix the broken commit in the editor

* How do you revert a Commit that has already been pushed and made public?

Git revert (name of the commit or the commitID)

* Difference between git pull and fetch?

git fetch works similarly the way as git pull but works a bit different way
* when we do fetch → pulls all new commits from the desired branch and stores it in a new branch in a local repository
→ if we want to reflect this changes in target branch git fetch will be followed with a git merge. So in this case your target branch will only be updated after merging the target branch and the fetched branch

* How to push a file from your local System on to Github repository using Git?

git push origin master.

* what is process to revert a Commit that has already been pushed and made public?
git Commit -m "Commit message"
git revert <commit id> Ex: git revert 569d0093f

* What is the Difference between git fetch and git pull?

| git fetch | Git pull |
|---|---|
| • git fetch only downloads new data from a remote repository | • Git pull updates from the Current HEAD branch with the Latest changes from the remote Server |
| • Does not integrate any of this new data into your working files | • It downloads new data and integrates it with Current working files |
| • Git fetch can be done any time to update the remote-tracking branches | • It tries to merge remote changes with your local ones |
| Command: git fetch origin<br>git fetch --all | Comand: git pull origin master |

* How do you find a list of files that has been Changed in a particular commit?

Command to get a list of files been changed in a particular Commit is

```
git diff-tree -r {commit hash}
```

Example : `git diff-tree -r 87e673f21b`

• -r flag allows the Command to list individual files
• commit hash will list all the files that were changed (or added in that Commit

* What is a merge conflict in Git and how can it be resolved?

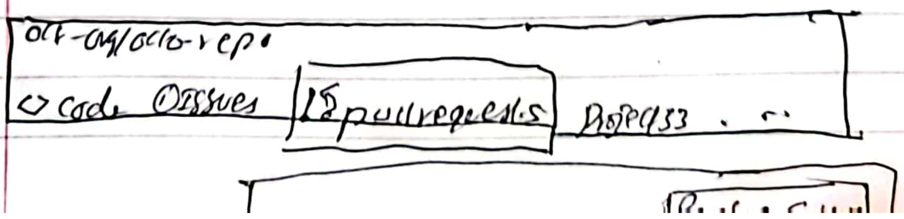
Git merge conflict → it raises when you have branches that have competing commits and Git needs your help to decide which changes to incorporate in the final merge.

→ manually Edit the conflit file to select the changes that you want to keep in the final merge

Resolve using Github conflict editor
⇒ This is done when merge conflict is caused by competing line changes i.e..
→ when people make different changes to same line of the same file on differen branches in your Git repository

* What is merge conflit and how can it be resolved?

Sol//
* Under your repository name, click pull requests
* In "pull requests" list, click the pull request with a merge conflit that you'd like to resolve.
* Near the bottom of your pull requests, click resolve conflits
* Decide if you want to keep only your branches changes, keep only the other branch's changes or make a brand new change, which may incorporate changes from both branches.



Open GitBash

Navigate into the local Git repository that has the merge Conflict

Generate a list of the files affected by the merge Conflict. In this example, the file Styleguide.md has a merge Conflict.

→ git status

* open any text editor, Such as sublime text or Atom, and nevigate to the file that has merge cliffs

* To See the begining of the merge conflict in your file, Search the file for the Conflict maker

⇒ you'll See the changes from the base branch after the line <<<<<HEAD

* Next you'll see $\boxed{=========}$, which divides your changes from the changes in the other brach, followed by >>>>>>BRANCH-NAME

```
If you have questions, please
<<<<<< HEAD
Open an issue
=======
ask your question in IRC
>>>>>>> branch-a.
```

Branching Strategy.

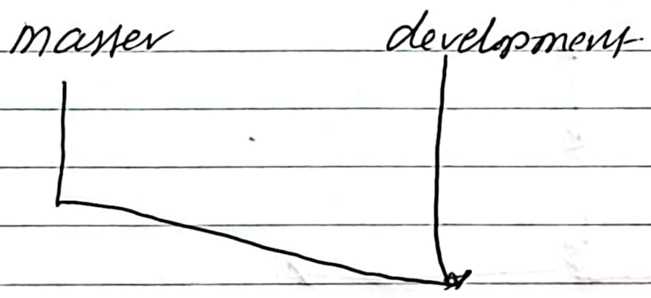
Git model.

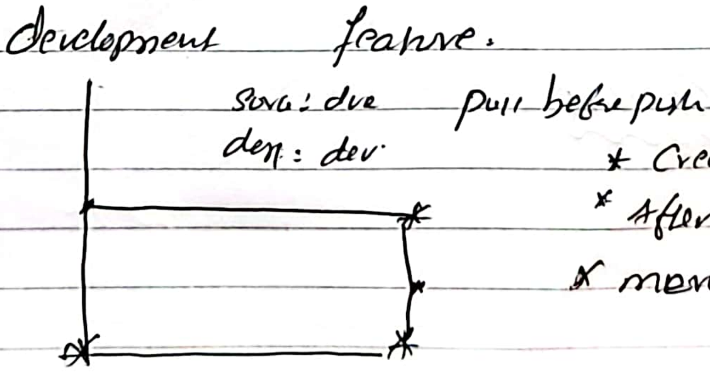
• Branching Strategy Name :
• Long lived , Short lived
* Source , destination
* merge, how to promote prod
* Conflicts.

→ Git model → refer to nive.com

1) master , development → long lived branches
↓ prod
↓ ahead of master
new features

2) feature, release, hotfix

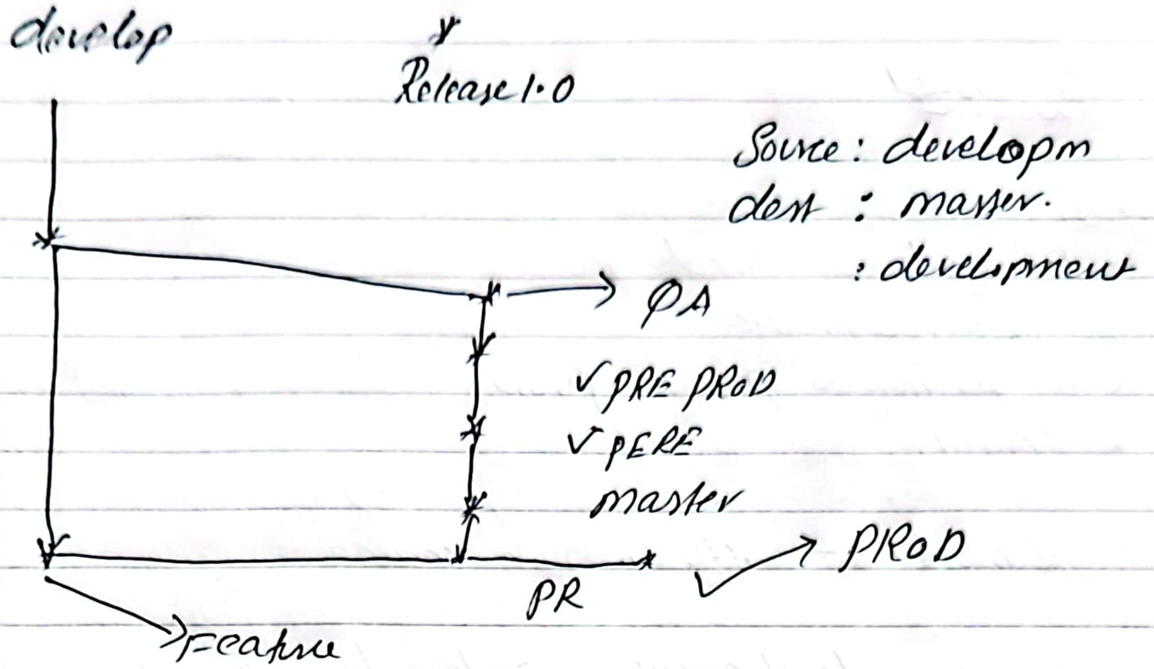




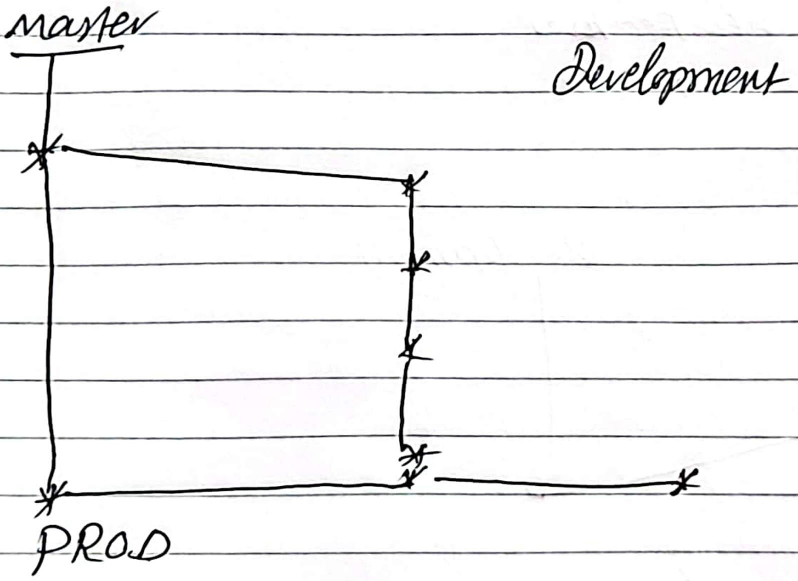
pull before push

* Create a feature from dev
* After finishing feature branch
* merch to dev branch.

## Release 1.0



## hotfix



## Conflits