



Intro to git & **GitHub**



GitHub
CampusExperts

WELCOME



JAY KHATRI

GITHUB CAMPUS EXPERT

Jay Khatri is pursuing his B.Tech. in Computer Science from CHARUSAT University. He loves to learn, build and share. Building android application is his forte.

He firmly believes that **“A journey of a thousand miles begins with a single step and there are miles to go before he sleeps.”**



GROUND RULES



Mute your Microphones
and Hide your Videos



If you have any doubts,
please ask them in Chat
section



Please maintain the
decorum



Please stay till the end and
attend every session for
exciting surprises



It is compulsory to fill both
pre and post workshop form
to be eligible for Certificate

#clubgamma @club_gamma



PRE WORKSHOP FORM

bit.ly/e1-pre

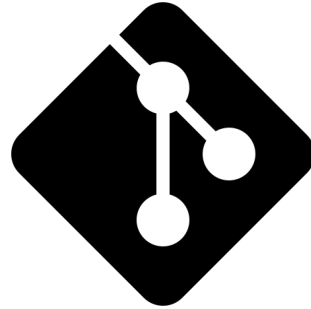


RUDRA BARAD



rudrabarad

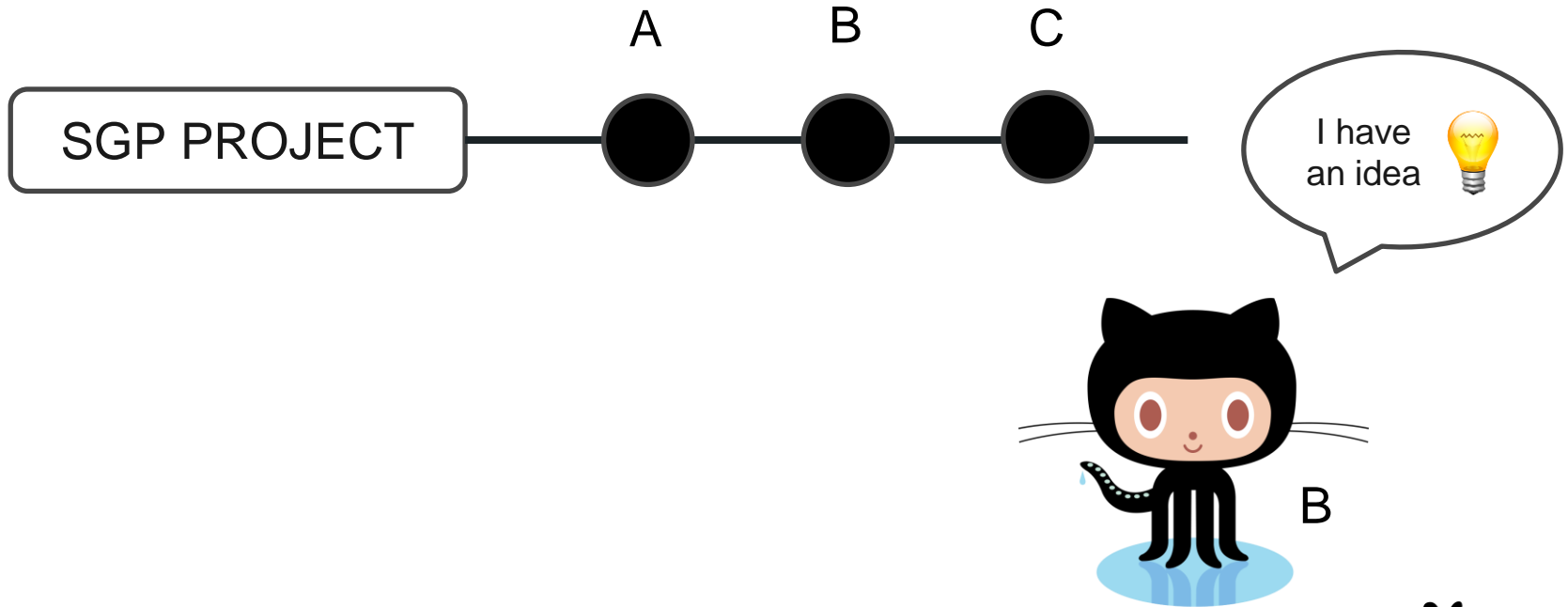
- Version Control System
- Git & GitHub
- Basics of GitHub
- GitHub Website Tour



GIT

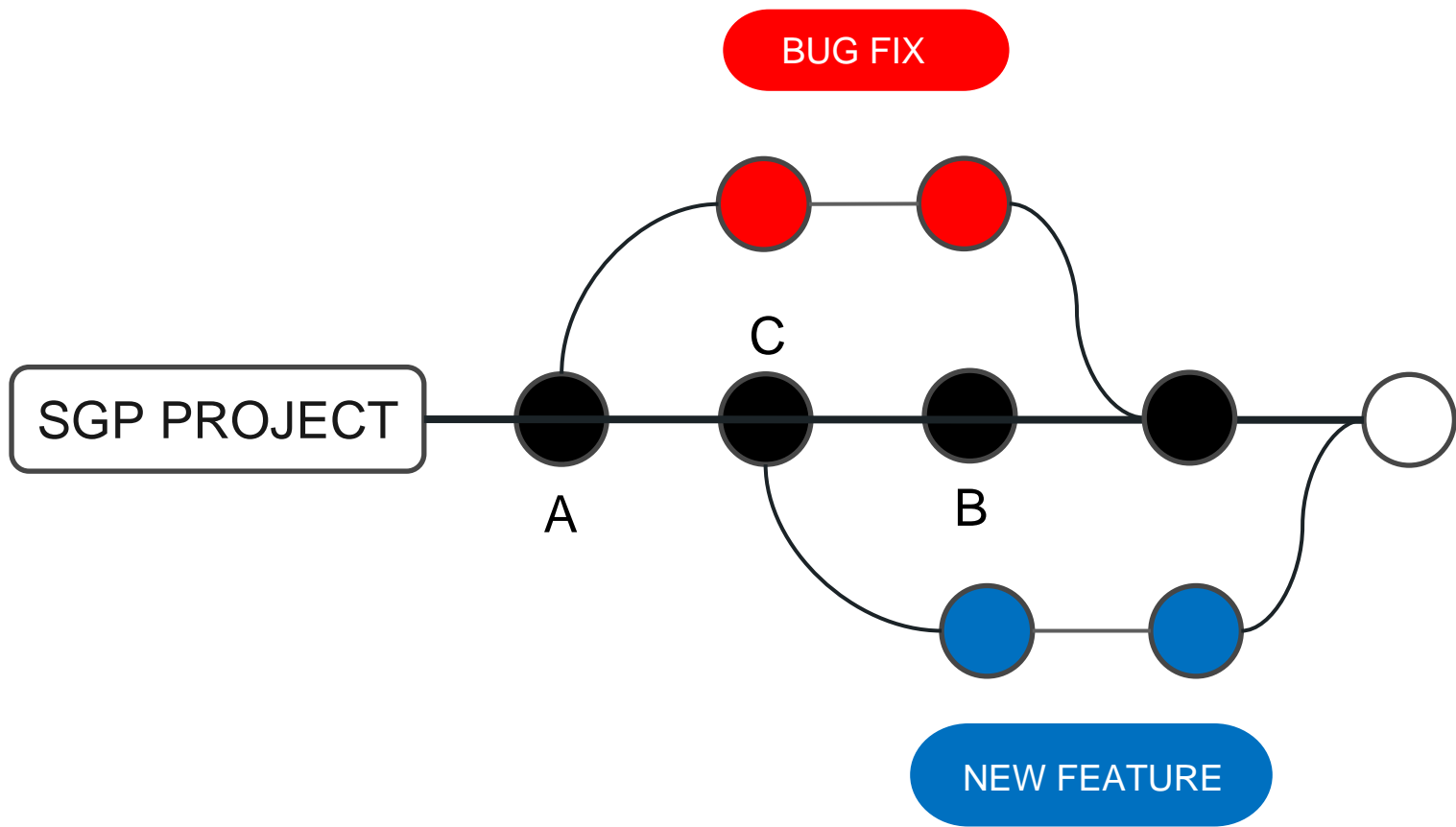
VCS (Version Control System)

WHY IT IS IMPORTANT ?





Bilkul risks ne lene ka



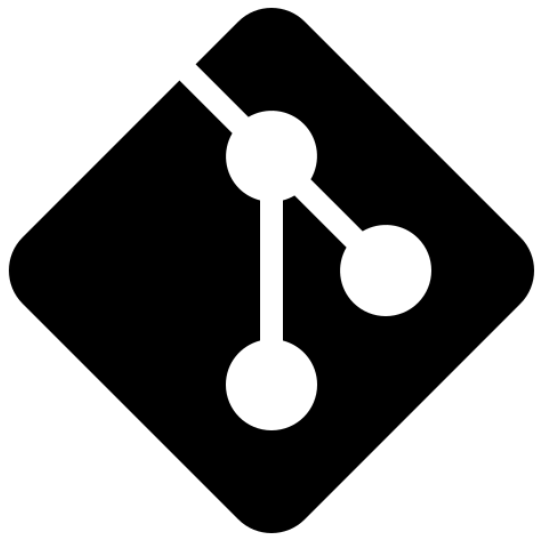
POLL TIME ! 🤔





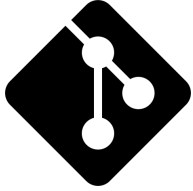
GitHub

Git



VS





INSTALLED LOCALLY

SOFTWARE

COMMAND-LINE
TOOL

TRACK CHANGES
LOCALLY

VS



HOSTED ON WEB

SERVICE

GRAPHICAL
INTERFACE

OPEN SOURCE



Let's take a look at **GitHub**

Repositories

A directory or storage space where your projects can live



COMMIT

As simple as saving a file after making any changes



FORK

Creating a copy of repository



Samajh nahi aaya. Par sun ke achha laga

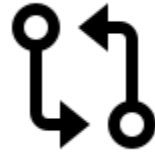


STAR

Same as Bookmark. Saving it for future



BRANCH



MERGE

Used to integrate code/files into a branch

It's not Rocket Science right ?







RUDRA BARAD

 rudrabarad

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Break time! Any Questions?

Let's catch up in 5 mins



CHIRAYU JOSHI

 chirayu-joshi

- README and LICENSE
- Hands on GitHub
- Real world examples
- Git Deep Dive

What is README.md ?

- Markdown file
- Used for project description
- Includes documentation, technologies used, demo, installation process, etc



What is LICENSE ?

- Decides other's control
- Used to Patent your project
- Example: MIT, Apache, GPL, etc



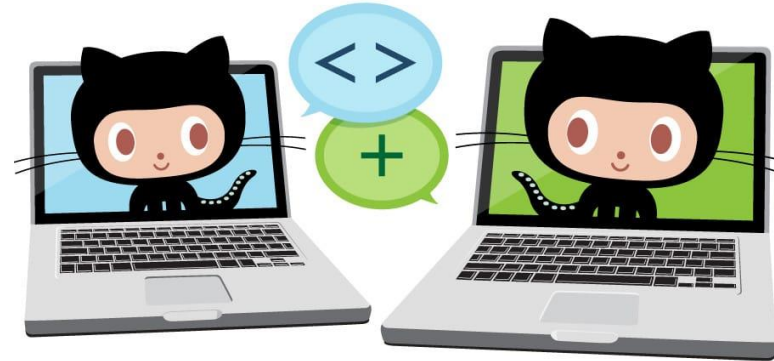
Hands on GitHub

- Create file
- Commit file
- Edit file
- Checkout versions



Real world example

- Create issue
- Create pull request
- Merge pull request
- Resolve conflicts



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Break time! Any Questions?

Let's catch up in 5 mins

Understanding Git architecture using commands



Local (Git)

Working
Directory

Staging
Area

Local
Repository

Remote (GitHub)

Remote
Repository

Local (Git)

Working
Directory

Staging
Area

Local
Repository

git add



Remote (GitHub)

Remote
Repository

git add

- git add *<file-name>*
- git add .

Local (Git)

Working
Directory

Staging
Area

Local
Repository

git add

git commit

Remote (GitHub)

Remote
Repository

git commit

- `git commit -m <commit-message>`
- `git commit`

Local (Git)

Remote (GitHub)

Working
Directory

Staging
Area

Local
Repository

Remote
Repository

git add

git commit

git push

git push

- git push *<destination>* *<source-branch>*



IN CASE OF FIRE



Git Commit



Git Push



Git Out

Performing fork and clone

Fork

6

Go to file

Add file ▾

↓ Code ▾

Clone with HTTPS ?

[Use SSH](#)

Use Git or checkout with SVN using the web URL.

`https://github.com/chirayu-joshi/video`



Open with GitHub Desktop



Download ZIP

Local (Git)

Remote (GitHub)

Working
Directory

Staging
Area

Local
Repository

Remote
Repository

git add

git commit

git push

git pull

git pull

- git pull *<source>*

Local (Git)

Remote (GitHub)

Working
Directory

Staging
Area

Local
Repository

Remote
Repository

git add

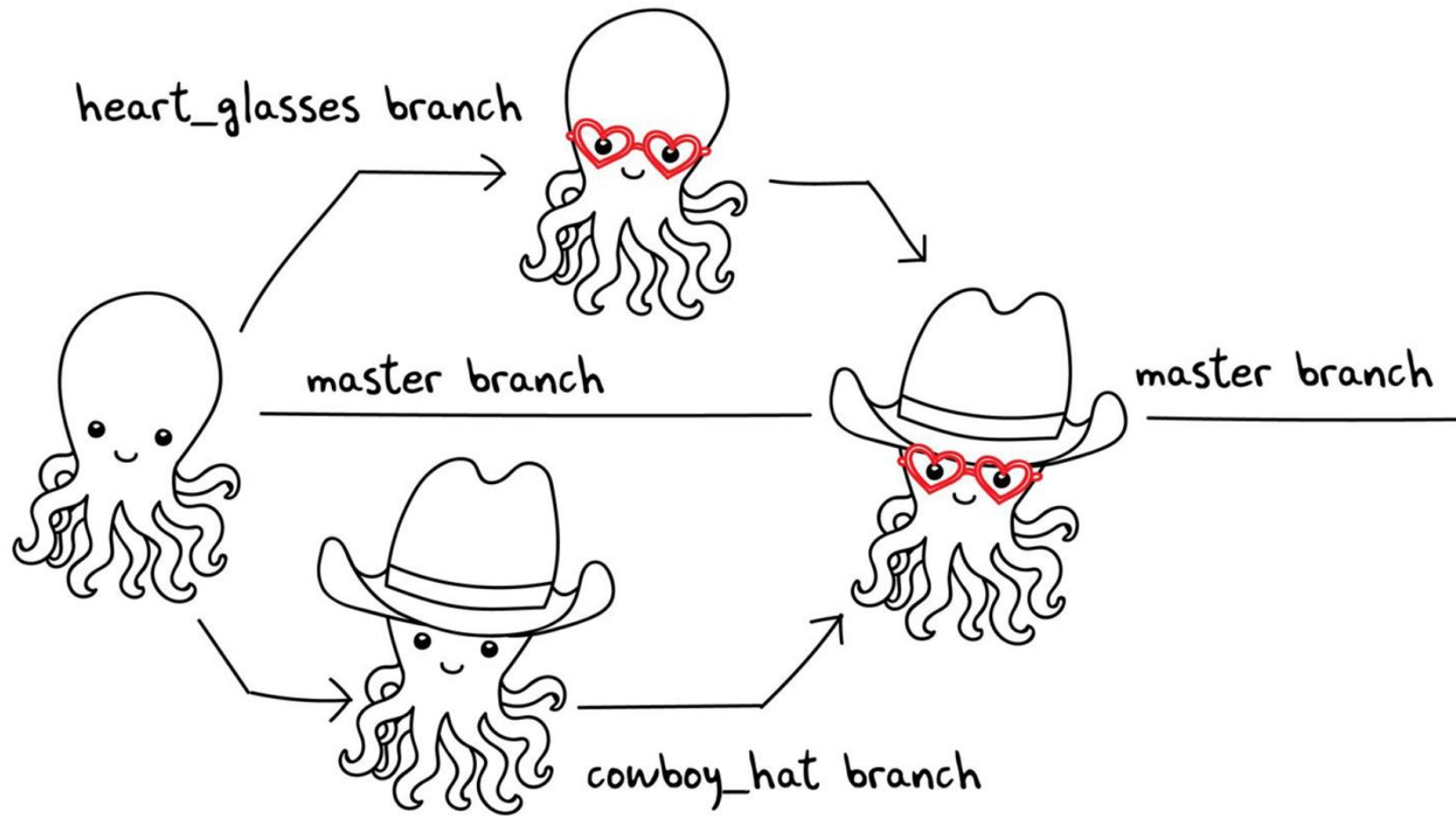
git commit

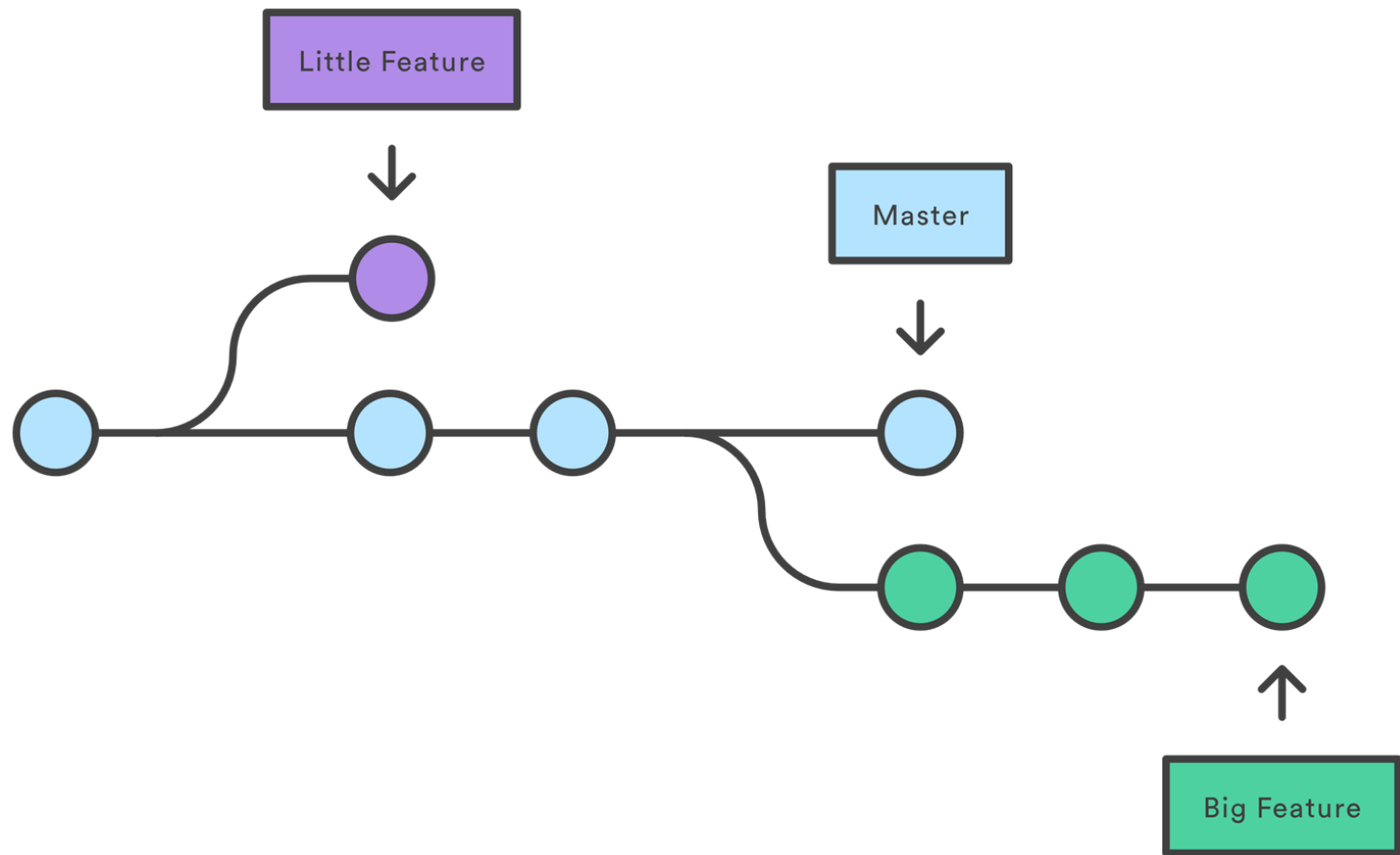
git push

git checkout

git branch

git pull





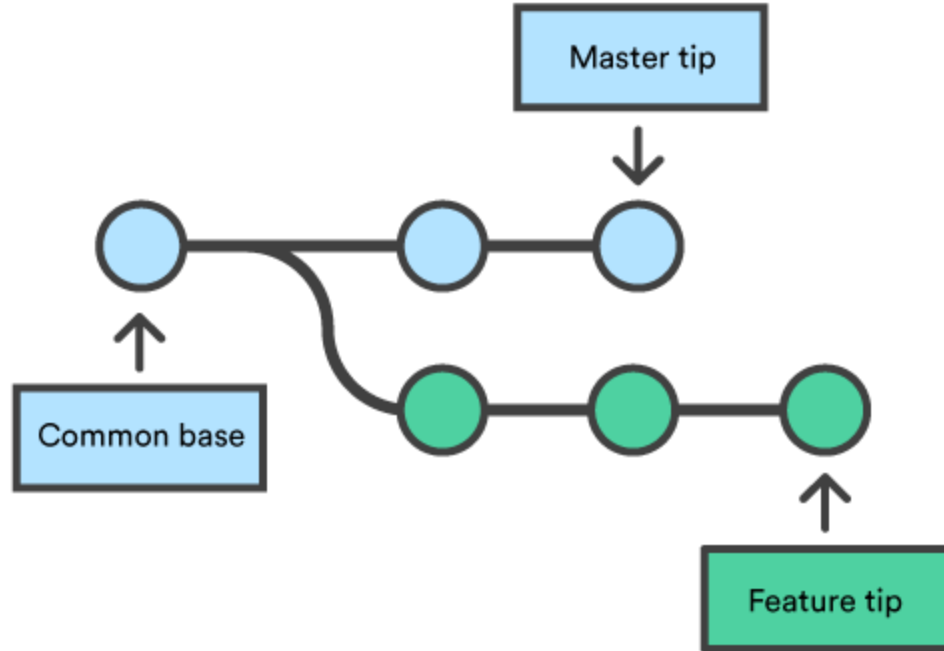
git branch

- git branch **or** git branch --list
- git branch *<branch-name>*
- git branch -d *<branch-name>*
- git branch -D *<branch-name>*
- git branch -m *<branch-name>*

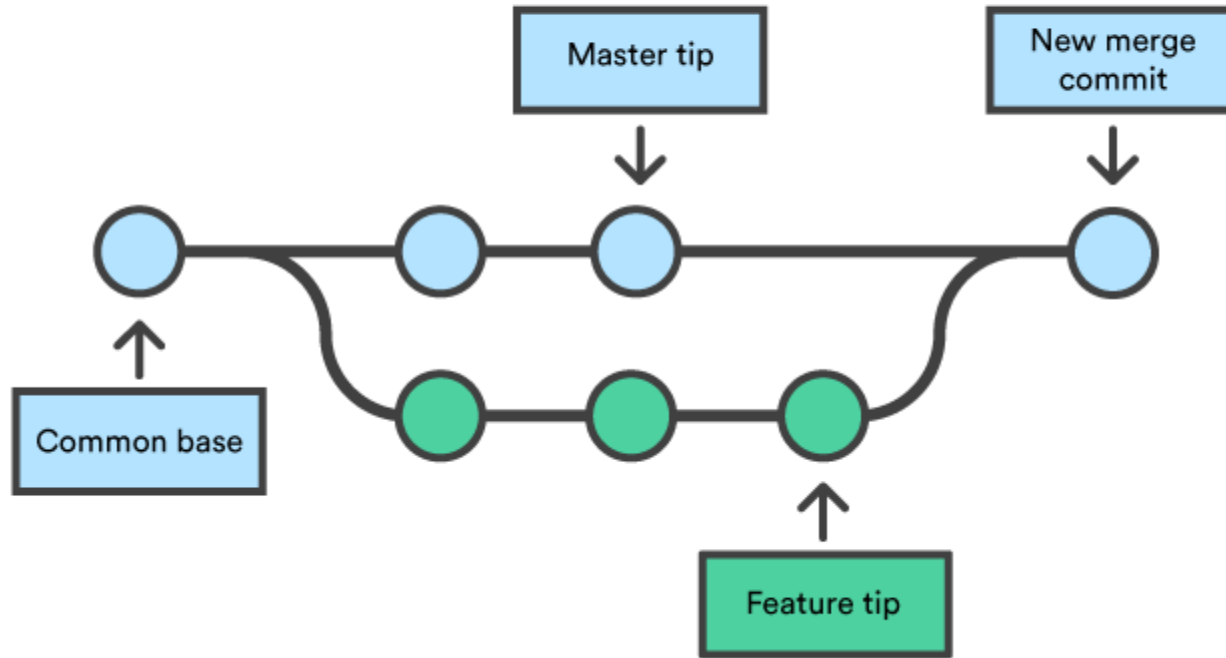
git checkout

- git checkout *<branch-name>*
- git checkout *<commit-hash>*
- git checkout -b *<new-branch>*

Merge branches



Merge branches



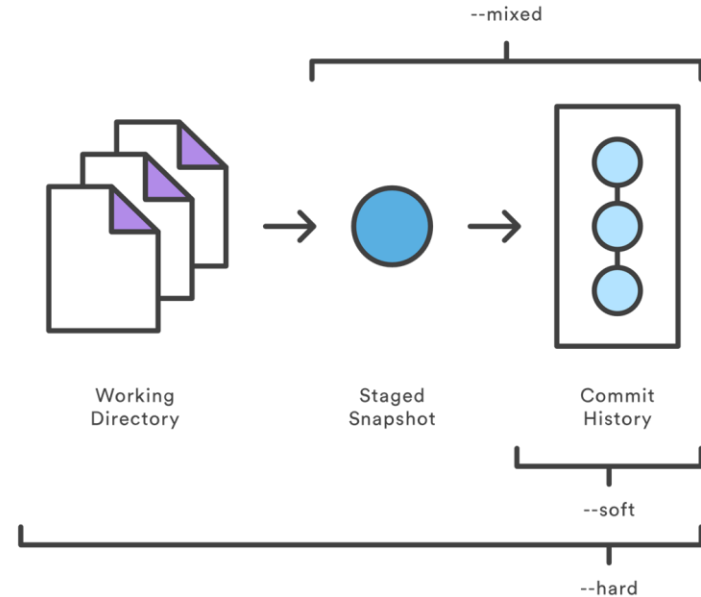
git merge

- git checkout *<final-branch-after-merging>*
- git merge *<branch-to-merge>*
- *<resolve-conflicts>*
- git log --merge
- git merge --abort

git reset

The scope of git reset's modes

- `git reset <attribute> <commit-hash-name>`
- Attributes:
 - `--hard`
 - `--mixed`
 - `--soft`
- Not Recommended





CHIRAYU JOSHI

 chirayu-joshi

That's it from my side !

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Break time! Any Questions?

Let's catch up in 5 mins

A woman with dark, wavy hair is sitting at a desk, pointing her right index finger directly at the camera. She is wearing a grey, short-sleeved top with a ruffled collar and cuffs. On her right ring finger, she has a ring with three horizontal bars. Her left hand is holding a white rectangular sign. The sign has black text that reads: "Now who is going to become master in Git". The background is a plain, light-colored wall.

**Now who is
going to
become master
in Git**