fudcon
PUNE

Version Control, You Git

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Plan of Talk

- Birth of Git
- Why the hell should I use Git?
- Initialize the Git
- Got DNA, make clone
- Push Pull to Boss i.e. Github
- Experimenting with Branch
- Conclusions
- Assignments on Public Demand

Must Prerequisite

Come with two things:

On Ubuntu:

```
# apt-get install git
```

On CentOS/Fedora/Arch:

```
# yum install git
```

Account on github.com

Birth of Git

- **Father of Git: Linus Torvalds**
- **Tired of Bitkeeper**
- **Features he wanted:**
  - Take Concurrent Versions System (CVS) as an example of what *not* to do; if in doubt, make the exact opposite decision
  - Support a distributed.
  - Very strong safeguards against corruption, either accidental or malicious

Why the hell should I use Git?

- Working on One PC
- Working on Two PC’s
- Working on Server Machine
- Still fail…..?

So, why not use Git?

Initialize the Git

To start bike we require Fuel

Similarly to get started with Git, we have to initialize it.

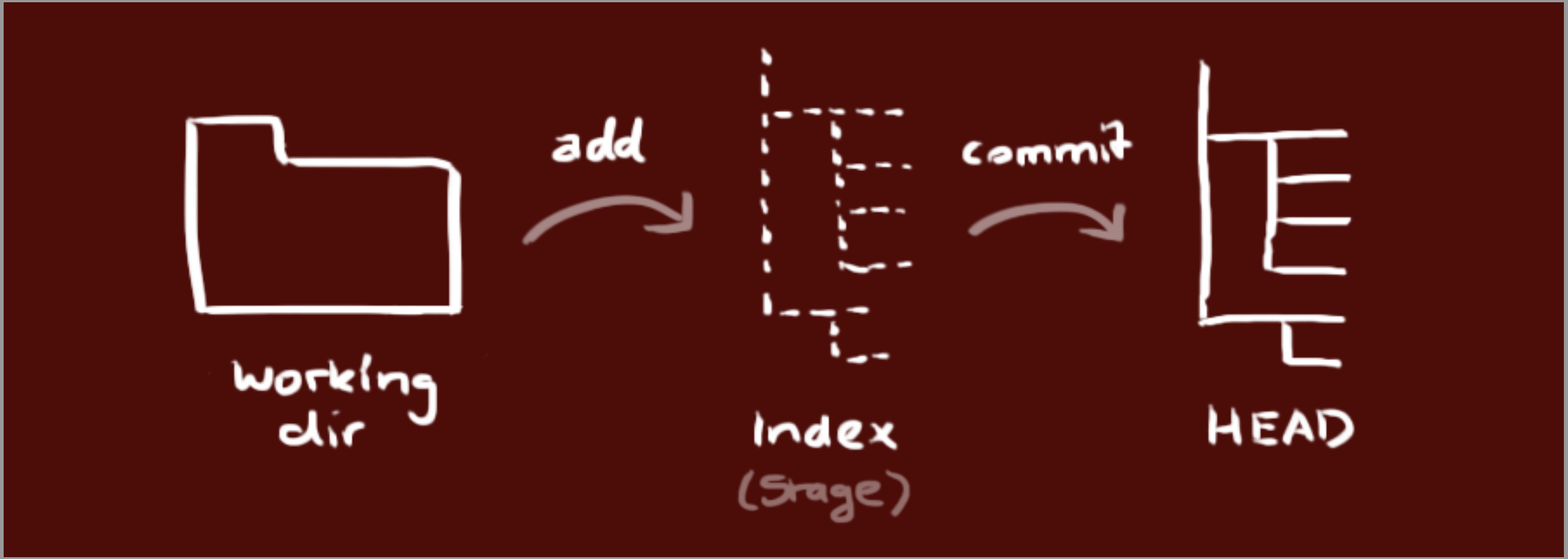
```
$ git init
```

Got DNA, make clone

As Human DNA makes clone of itself, so the Git

```
$ git clone https://github.com/ramlaxman/Fudcondemo.git
```

Add to Commit



When make change in file always check these commands:

```
$  git status -s
$  git add ram.txt
$  git commit -m “File Created”
```

Folder addition to Repo

```
$ mkdir samp-fold
$ cd samp-fold
```

Need one file for submission

```
$ touch ram.txt
$ cd ..
$ git add samp-fold/
$ git commit -m “folder created”
```

Push Pull to Boss i.e. Github

Now ready to send your work.

- git push origin master

If it fails meaning “Kuchh to gadabad hai”, for that Pata Karo ki :

- SSH hain?
- Internet shuru hai?

like these.

SSH Procedure:

Just follow this awesome help link:

https://help.github.com/articles/generating-ssh-keys/

Want to Bypass SSH?

Try this:

```
$ git push git@github.com:username/repo.git
```

for ex,

```
$ git push git@github.com:ramlaxman/Fudcondemo.git
```

Experimenting with Branch

Make a copy and work on it.

Like, Xerox of Important Paper.

In same manner, create duplicate of existing repository, you have to create branch of it

```
$ git checkout -b new_branch
```

To switch

```
$ touch a2.txt
$ vi a2.txt
$ git add a2.txt
$ git commit -m “a2.txt created”
$ git push origin master
```

Now go to web browser, checkout master branch you will also find branch “new_branch”

Switch back to master

```
$ git checkout master
```

and delete the branch again

```
$ git branch -d new_branch
```

A branch is not available to others unless you push the branch to your remote repository

```
$ git push origin master
```

So for new branch, to complete changes in Updated on Git Repo:

```
$ git checkout -b new_branch
$ touch a2.txt
$ vi a2.txt
$ git add a2.txt
$ git commit -m “a2.txt created”
$ git push origin new_branch
```

Now, real part starts

```
$ vi a2.txt    // change some text in a2.txt
$ git status   // to know status of updation and files to be send
$ git add a2.txt
$ git commit -m “modified”
$ git status
$ git pull origin new_branch
$ git push origin new_branch
```

And you will see your file has been updated on the Git. Hurray!!

Conclusions

- Hope Basics are clear.
- You can push changes to your own repo.
- If any problem like serious buggy code has push, so how to revert……will be in set of curiosity.

Assignments on Public Demand