

# Source Code Management



Vikas Verma

# Objectives

- Version Control
- Git, Git repository
- Git vs Github
- Setup git environment
- Create a git repository ( adding file, adding folder)
- Checkout different version/ignore files...
- Git tools

# "FINAL".doc



FINAL.doc!



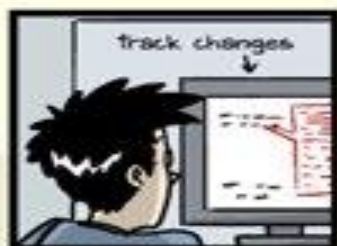
FINAL\_rev.2.doc



FINAL\_rev.6.COMMENTS.doc



FINAL\_rev.8.comments5.  
CORRECTIONS.doc



FINAL\_rev.18.comments7.  
corrections9.MORE.30.doc



FINAL\_rev.22.comments49.  
corrections.10. #@\$%WHYDID  
ICOMETOGRADSCHOOL?????.doc

# Why Version Control?

- **Collaboration**
- **Versioning**
- **Rolling Back**
- **Understanding**

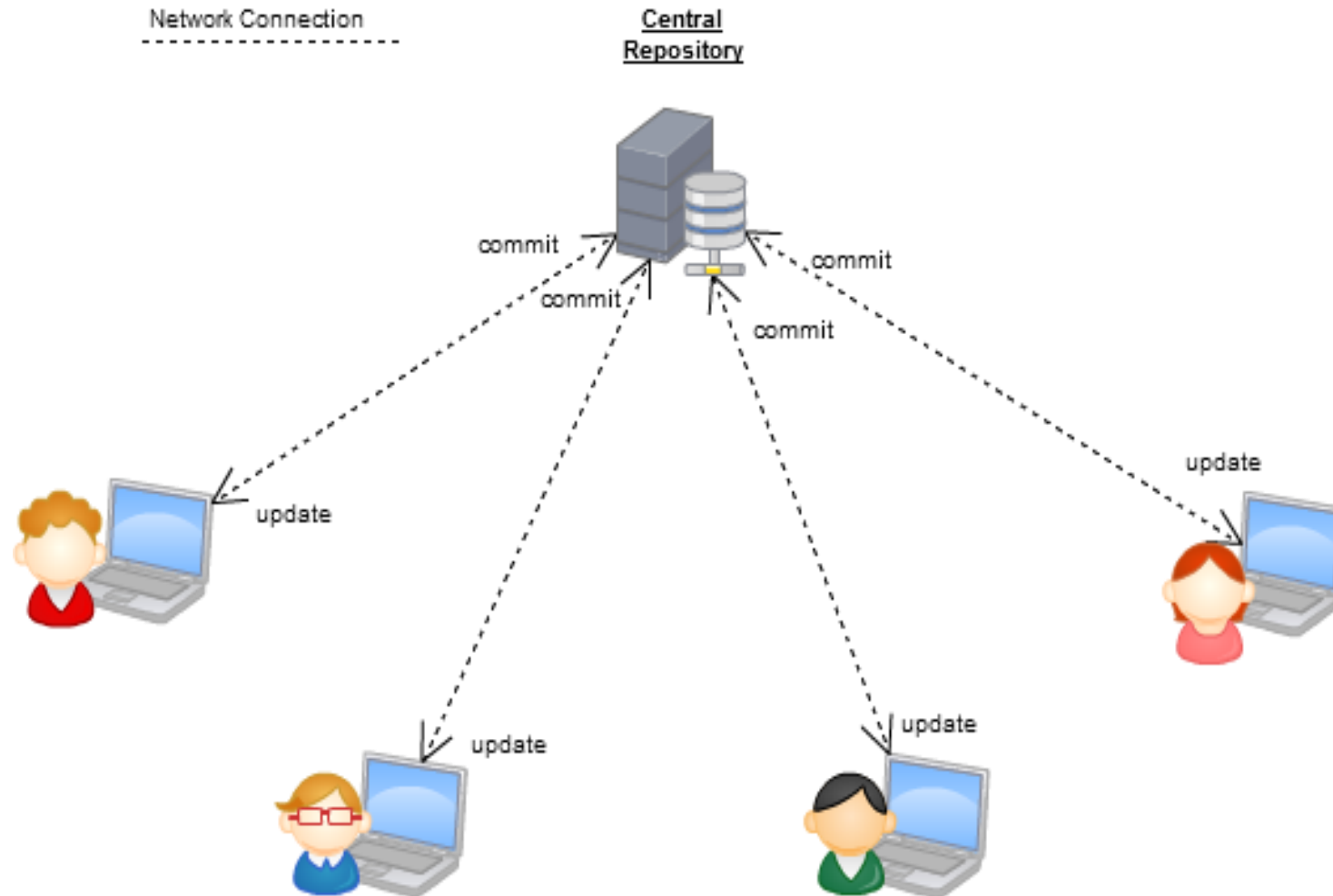
**Scenario** : Multiple students are doing a project together

**Question**: Why not Google drive & One drive ????

- source code management vs file storage management

# Version Control Systems

- Some well-known version control systems are **CVS**, **Subversion**, **Mercurial**, and **Git**



# Git

vs.

# GitHub



Git is installed and maintained on your local system (rather than in the cloud)



First developed in 2005



One thing that really sets Git apart is its branching model

Git is a high quality version control system

GitHub is designed as a Git repository hosting service



You can share your code with others, giving them the power to make revisions or edits

GitHub is a cloud-based hosting service



GitHub is exclusively cloud-based



➤ **Download and install**  
**yum install git**

➤ **Configure**

- Generating a pair of ssh keys:

```
ssh-keygen -t rsa -C Vikas_Verma1@epam.com
```

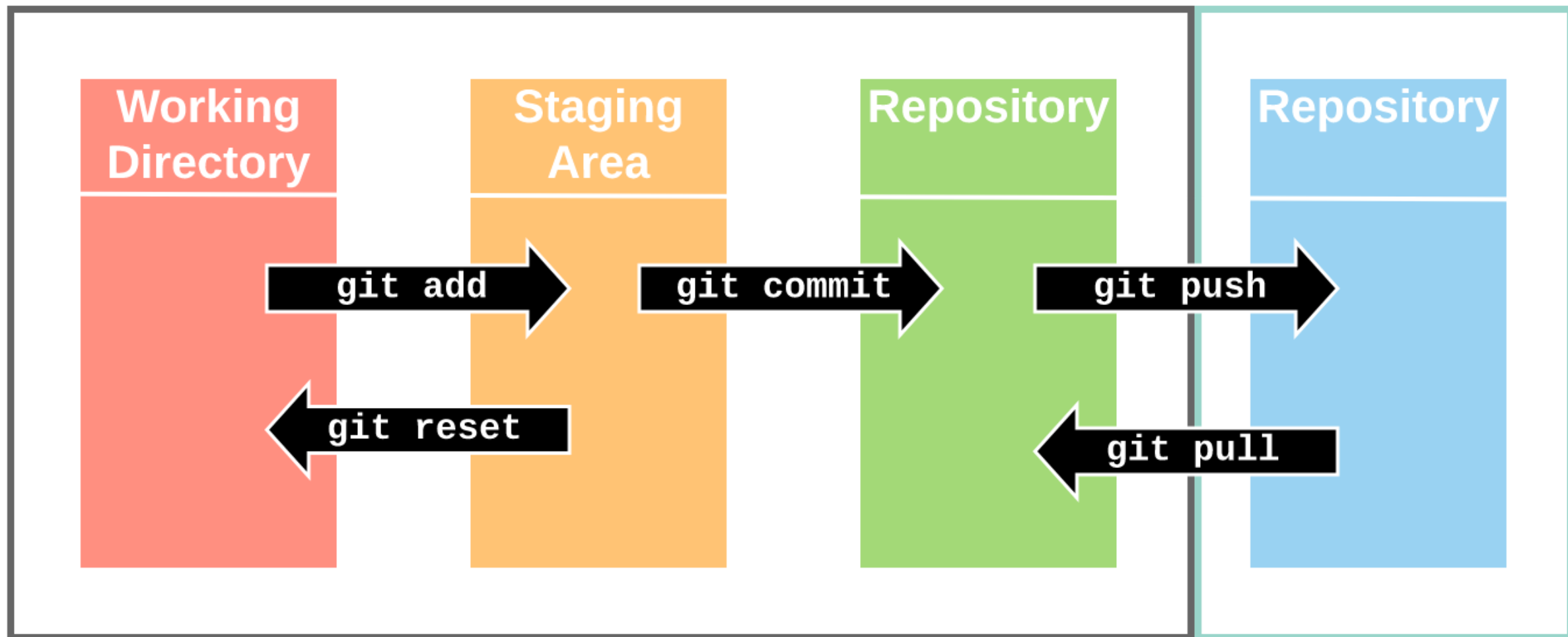
- Username and email settings:

```
git config --global user.name "Vikas Verma"
```

```
git config --global user.email "Vikas_Verma1@epam.com"
```

## LOCAL

## REMOTE





# Commands

git clone

git init

git add

git commit

git push

git show -s commit {commitSHA1}

git ls-tree {treeSHA}

git show {blobSHA}

# Commands

git remote set-url origin {ssh/https}

git checkout -b {branchname}

git pull

git checkout {branchname}

Any Questions?

---

