UNIVERSITÄT PADERBORN
Die Universität der Informationsgesellschaft

GIT – Version Control System

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Project Group: Data Extraction, Search, Analysis and Benchmarking

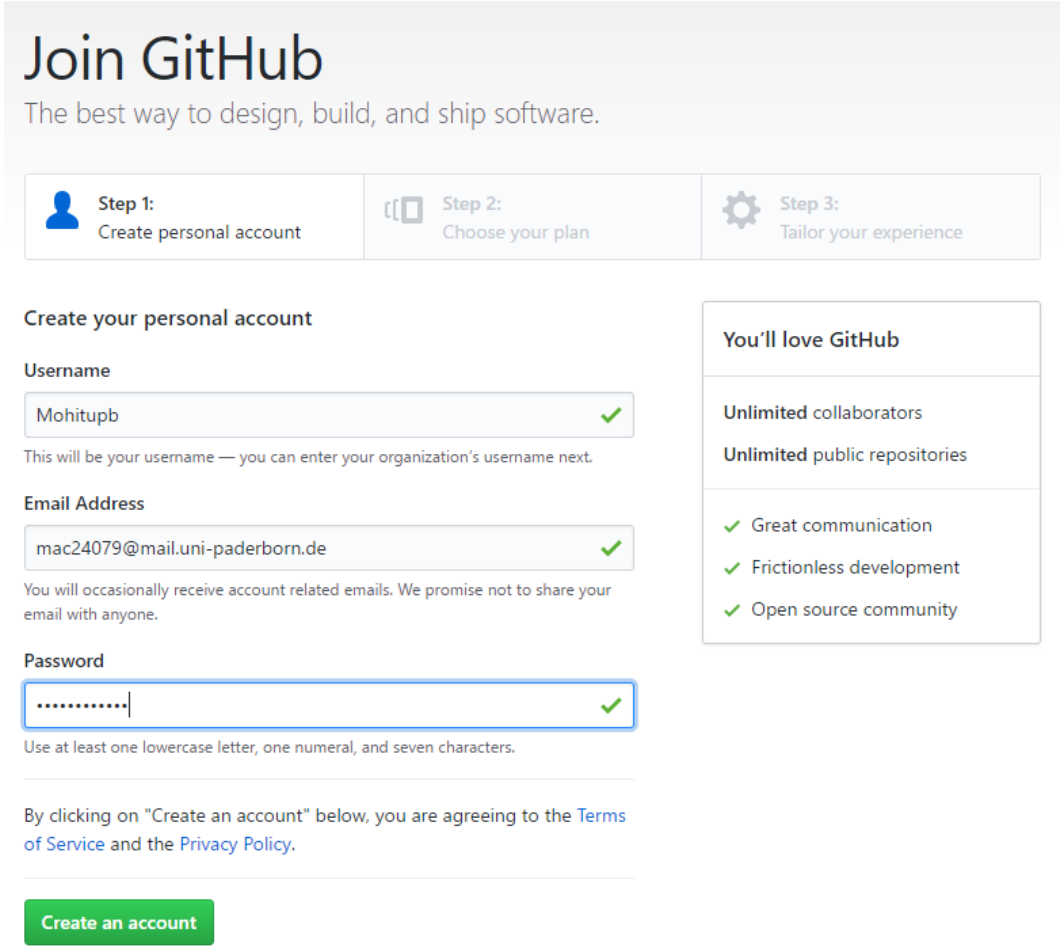
What is GIT ?

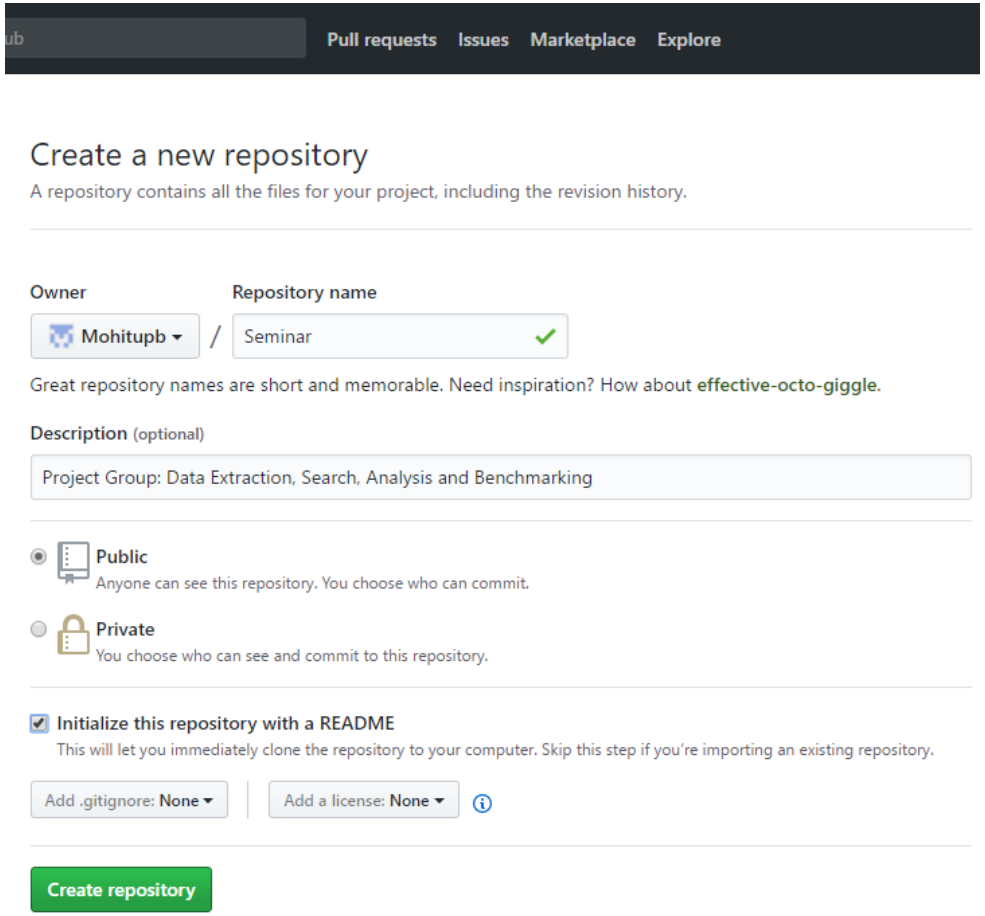
A version Control system

A version control system are a category of software tools that keep track of changes to the code in a special kind of database and help the software team manage changes to source code over time

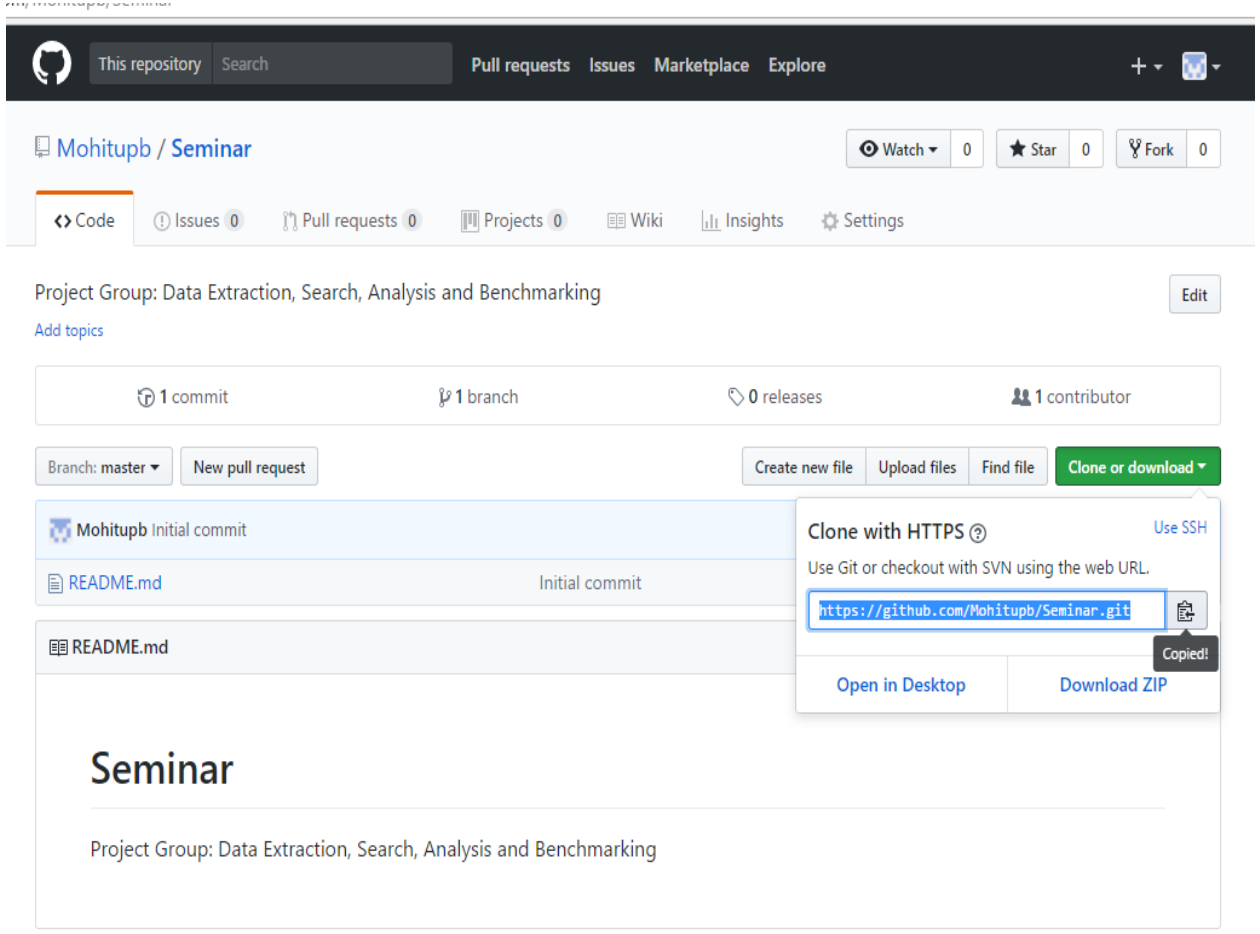
- Keep track of changes to code
- Synchronizes code between different people
- Your code will always be available with you

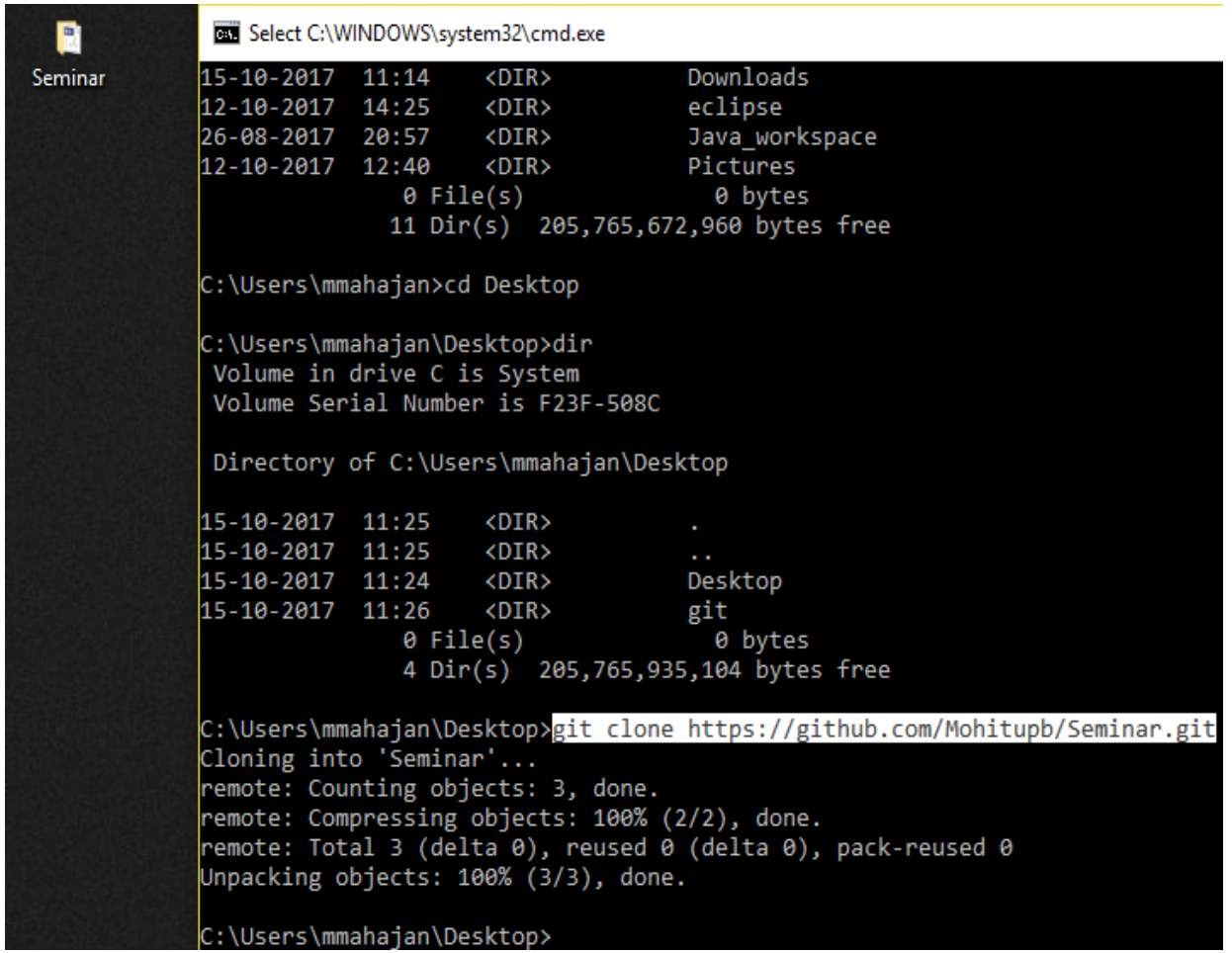
GitHub & Creating a Repo





GIT Clone


This repository
Search
Pull requests
Issues
Marketplace
Explore
Mohitupb / Seminar
Watch 0
Star 0
Fork 0
Code
Issues 0
Pull requests 0
Projects 0
Wiki
Insights
Settings
Project Group: Data Extraction, Search, Analysis and Benchmarking
Edit
Add topics
1 commit
1 branch
0 releases
1 contributor
Branch: master
New pull request
Create new file
Upload files
Find file
Clone or download
Mohitupb Initial commit
README.md
Initial commit
Clone with HTTPS
Use SSH
Use Git or checkout with SVN using the web URL.
https://github.com/Mohitupb/Seminar.git
Copied!
Open in Desktop
Download ZIP
README.md
Seminar
Project Group: Data Extraction, Search, Analysis and Benchmarking


Seminar
Select C:\WINDOWS\system32\cmd.exe
15-10-2017 11:14 <DIR> Downloads
12-10-2017 14:25 <DIR> eclipse
26-08-2017 20:57 <DIR> Java_workspace
12-10-2017 12:40 <DIR> Pictures
0 File(s) 0 bytes
11 Dir(s) 205,765,672,960 bytes free
C:\Users\mmahajan>cd Desktop
C:\Users\mmahajan\Desktop>dir
Volume in drive C is System
Volume Serial Number is F23F-508C
Directory of C:\Users\mmahajan\Desktop
15-10-2017 11:25 <DIR> .
15-10-2017 11:25 <DIR> ..
15-10-2017 11:24 <DIR> Desktop
15-10-2017 11:26 <DIR> git
0 File(s) 0 bytes
4 Dir(s) 205,765,935,104 bytes free
C:\Users\mmahajan\Desktop>git clone https://github.com/Mohitupb/Seminar.git
Cloning into 'Seminar'...
remote: Counting objects: 3, done.
remote: Compressing objects: 100% (2/2), done.
remote: Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
Unpacking objects: 100% (3/3), done.
C:\Users\mmahajan\Desktop>

GIT Clone

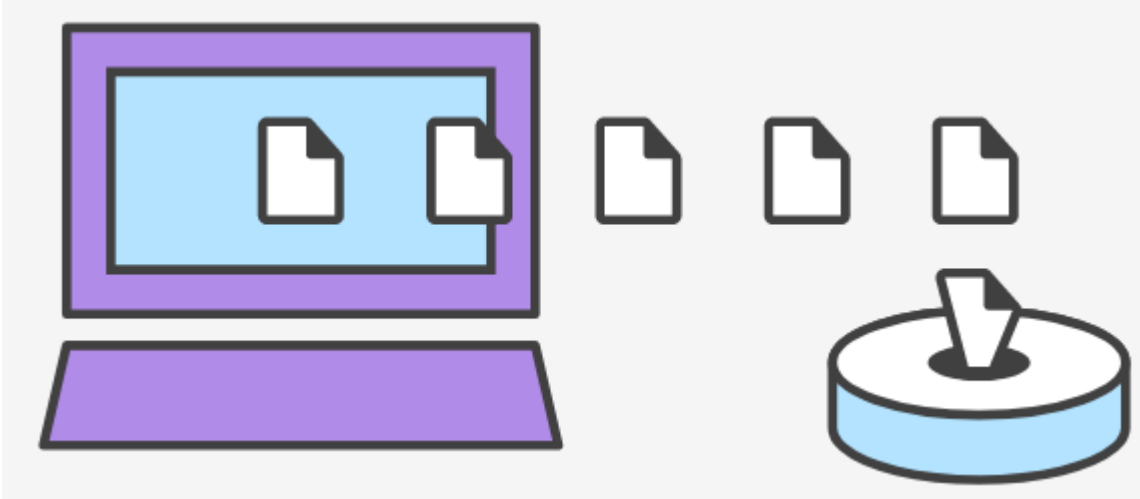
Creates a copy of repository and stores into your computer

git clone <url>

GIT Add

Add files to the staging area

git add <filename>



Git Commit

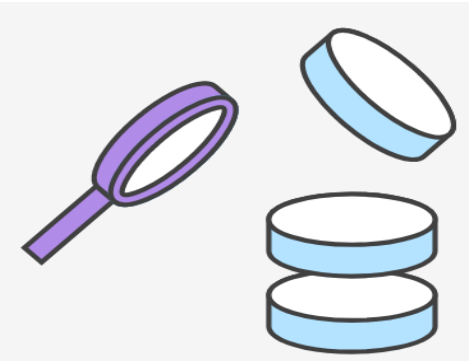
Save changes to repository as a new version

git commit –m “ message “

GIT Status

Shows the current status of the repository

git status



GIT Push

Allows to send changes to the repository

git push origin master

Git Pull

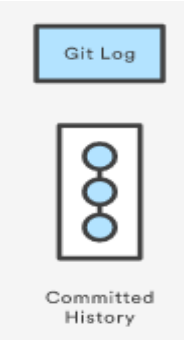
Retreives changes from the remote repository to obtain a recent version of code/files

git pull origin master

GIT Log

Shows a history of commits and messages

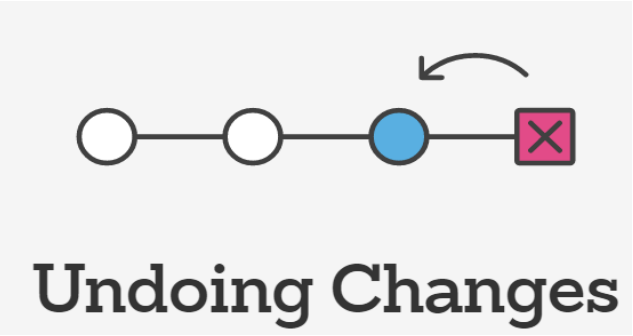
git log



GIT Reset

Allows to undo the code back to a previous commit

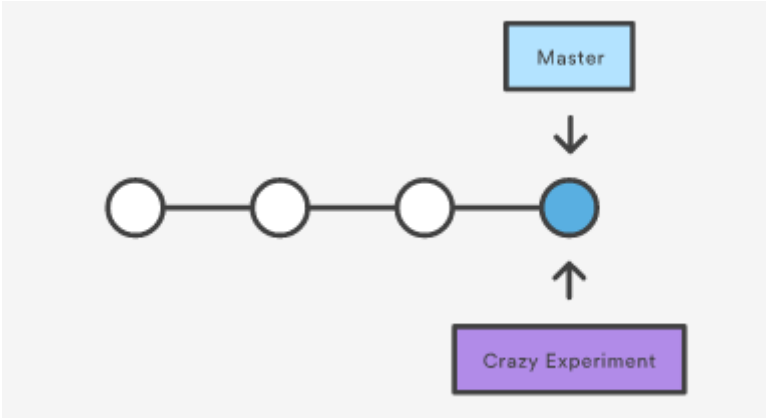
git reset --hard <commit>



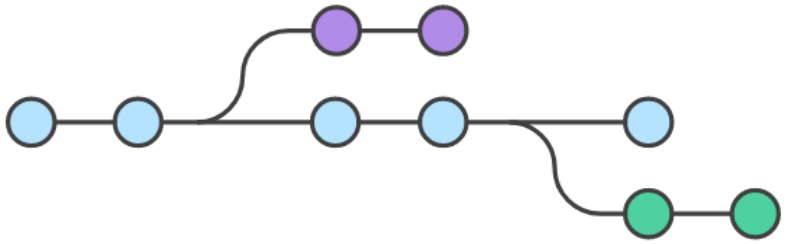
Fork A Repo

Allows you to freely experiment with changes without affecting the original project by creating a copy of project

Branching



- Branch is a version of the repository
- Every branch has its own commit history
- The branch is totally independent of the master branch
- When working with branches you are relaxed from messing up the master branch
- Once sure that the branch is ready you can merge that to the master branch



Reference Links

Install GIT

https://www.atlassian.com/git/tutorials/install-git

Learn GIT

https://www.atlassian.com/git/tutorials/learn-git-with-bitbucket-cloud

GIT Commands

https://www.atlassian.com/git/tutorials/atlassian-git-cheatsheet


Thanks for
your attention