

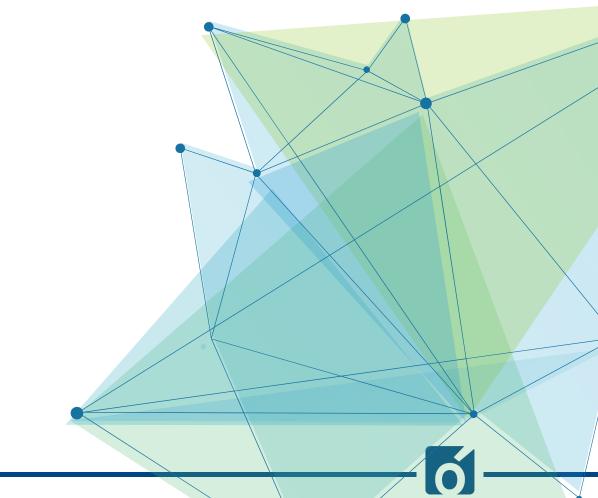


git - COMMIT

Presented By: Shubham Shrivastava

Content

- Introduction of git
- Download and Install git
- Making Commit
- Commits and graphs
- Assignment Solution



Introduction of git

Git stores and thinks about information much differently than these other systems. In VCS, the information they keep as a set of files and the changes made to each file over time. Git thinks of its data more like a set of snapshots of a miniature filesystem. Every time you commit, or save the state of your project in Git, it basically takes a picture of what all your files look like at that moment and stores a reference to that snapshot. Git tracks changes, not versions. No single point of failure. Participation and forking of projects allowed.

Enter these lines (with appropriate changes):

ngit config --global user.name "John Smith"

ngit config --global user.email jsmith@seas.upenn.edu

You only need to do this once. If you want to use a different name/email address for a particular project, you can change it for just that project. cd to the project directory

Use the above commands, but leave out the --global



Download and Install git

There are online materials that are better than any that I could provide.

Here's the standard one: http://git-scm.com/downloads





Making commit

- You do your work in your project directory, as usual
- If you create new files and/or folders, they are not tracked by Git unless you ask it to do so
 - git add newFile1 newFolder1 newFolder2 newFile2
- Committing makes a "snapshot" of everything being tracked into your repository
 - A message telling what you have done is required
 - git commit -m "Uncrevulated the conundrum bar"
 - git commit
 - This version opens an editor for you the enter the message
 - To finish, save and quit the editor
- Format of the commit message
 - One line containing the complete summary
 - If more than one line, the second line must be blank

Commits and graphs

- A commit is when you tell git that a change (or addition) you have made is ready to be included in the project
- When you commit your change to git, it creates a commit object
 - A commit object represents the complete state of the project, including all the files in the project
 - The very first commit object has no "parents"
 - Usually, you take some commit object, make some changes, and create a new commit object; the original commit object is the parent of the new commit object
 - Hence, most commit objects have a single parent
 - You can also merge two commit objects to form a new one
 - The new commit object has two parents
- Hence, commit objects form a directed graph
 - Git is all about using and manipulating this graph

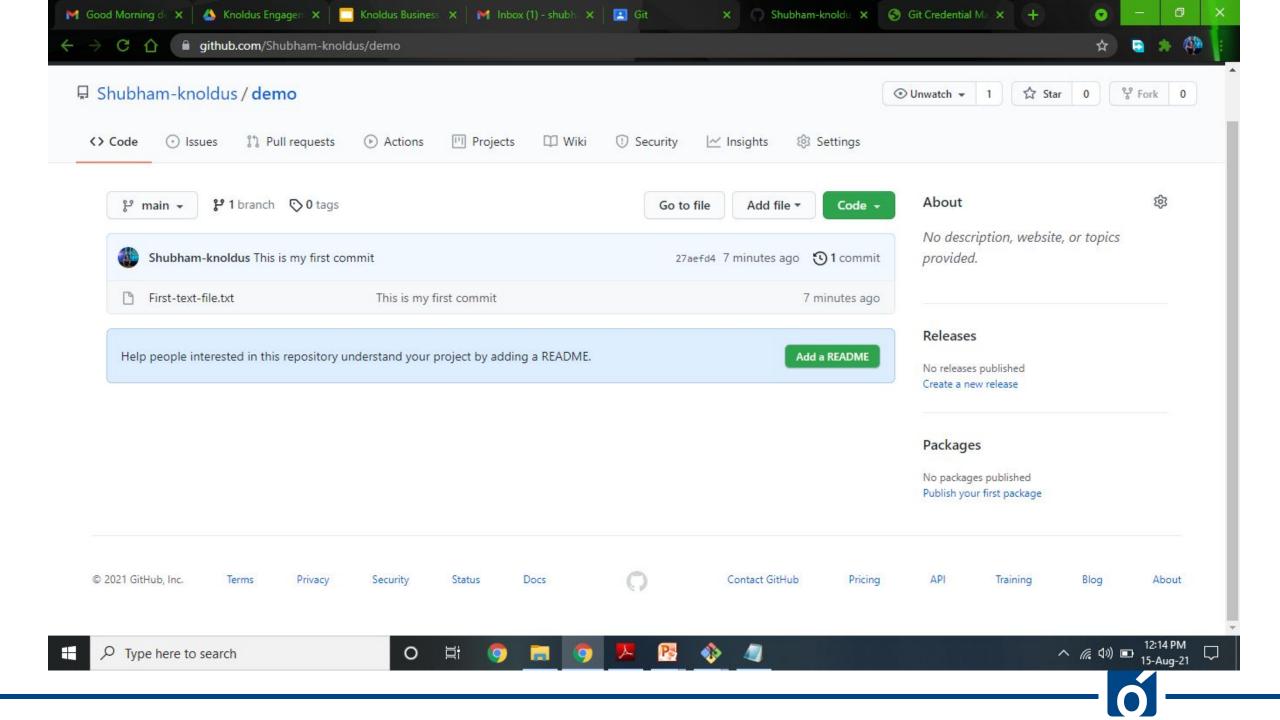


Git Commits

Assignment Solution

```
Shubham@DESKTOP-3P9MTAF MINGW64 /
$ git --version
git version 2.32.0.windows.2
Shubham@DESKTOP-3P9MTAF MINGW64 /
$ git config --global user.name "shubham-knoldus"
Shubham@DESKTOP-3P9MTAF MINGW64 /
$ git config --global user.email shubham.shrivastava@knoldus.com
Shubham@DESKTOP-3P9MTAF MINGW64 /
$ mkdir demo1
mkdir: cannot create directory 'demo1': Permission denied
```

```
MINGW64:/c/Users/Shubham/Demo-kip/.git/demo
   (use "git add <file>..." to include in what will be committed)
 nothing added to commit but untracked files present (use "git add" to track)
 Shubham@DESKTOP-3P9MTAF MINGW64 ~/Demo-kip/.git/demo (master)
 $ git add .
 warning: LF will be replaced by CRLF in First-text-file.txt.
The file will have its original line endings in your working directory
 Shubham@DESKTOP-3P9MTAF MINGW64 ~/Demo-kip/.git/demo (master)
$ git status
 On branch master
No commits yet
Changes to be committed:
   (use "git rm --cached <file>..." to unstage)
        new file: First-text-file.txt
 Shubham@DESKTOP-3P9MTAF MINGW64 ~/Demo-kip/.git/demo (master)
 $ git commit -m "This is my first commit"
 [master (root-commit) 27aefd4] This is my first commit
 1 file changed, 1 insertion(+)
 create mode 100644 First-text-file.txt
 Shubham@DESKTOP-3P9MTAF MINGW64 ~/Demo-kip/.git/demo (master)
 $ git branch -M main
 Shubham@DESKTOP-3P9MTAF MINGW64 ~/Demo-kip/.git/demo (main)
 $ git remote add origin https://github.com/Shubham-knoldus/demo.git
 Shubham@DESKTOP-3P9MTAF MINGW64 ~/Demo-kip/.git/demo (main)
 $ git push -u origin master
 error: src refspec master does not match any
       failed to push some refs to 'https://github.com/Shubham-knoldus/demo.git
 Shubham@DESKTOP-3P9MTAF MINGW64 ~/Demo-kip/.git/demo (main)
 $ git push -u origin main
 Enumerating objects: 3, done.
 Counting objects: 100% (3/3), done.
 Writing objects: 100% (3/3), 268 bytes | 134.00 KiB/s, done.
 Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
 To https://github.com/Shubham-knoldus/demo.git
  * [new branch]
                     main -> main
 Branch 'main' set up to track remote branch 'main' from 'origin'.
 Shubham@DESKTOP-3P9MTAF MINGW64 ~/Demo-kip/.git/demo (main)
$
                                                                                                                                                                       へ (編 句)) 回 12:12 PM
15-Aug-21
         Type here to search
```





Thank You

Presented By : Shubham Shrivastava

Git Link:
.https://github.com/Shubham-knoldus/demo