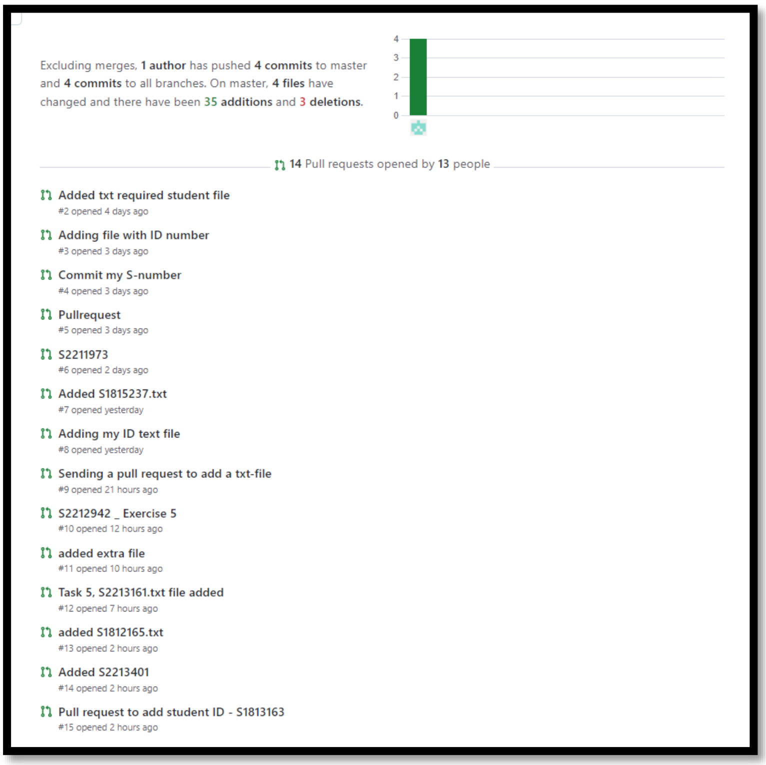
1 Clone the repository for the class: https://github.com/BI-DS/GRA-4152

a) Explore the version history by visualizing it as a graph.

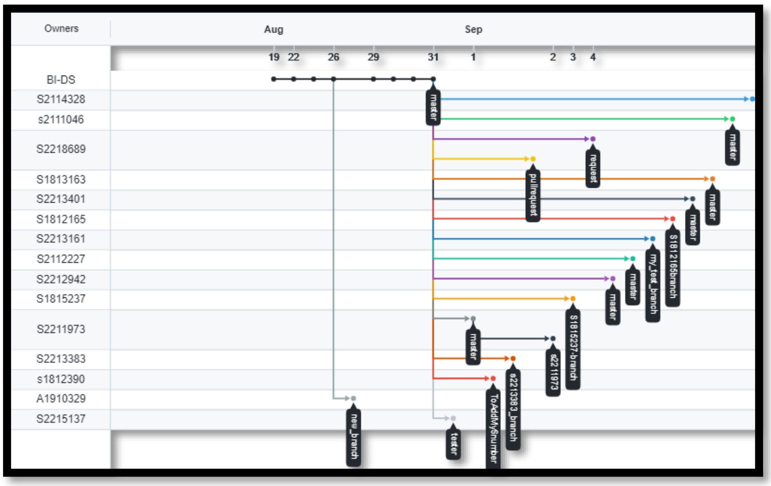
>>>



Excluding merges, **1 author** has pushed **4 commits** to master and **4 commits** to all branches. On master, **4 files** have changed and there have been 35 **additions** and 3 **deletions**.

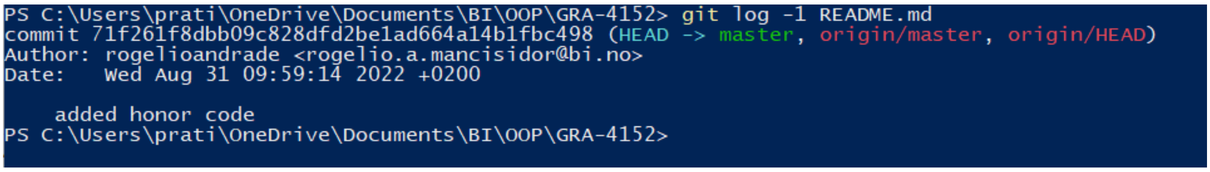
14 Pull requests opened by 13 people

- **Added txt required student file**
  #2 opened 4 days ago
- **Adding file with ID number**
  #3 opened 3 days ago
- **Commit my S-number**
  #4 opened 3 days ago
- **Pullrequest**
  #5 opened 3 days ago
- **S2211973**
  #6 opened 2 days ago
- **Added S1815237.txt**
  #7 opened yesterday
- **Adding my ID text file**
  #8 opened yesterday
- **Sending a pull request to add a txt-file**
  #9 opened 21 hours ago
- **S2212942 _ Exercise 5**
  #10 opened 12 hours ago
- **added extra file**
  #11 opened 10 hours ago
- **Task 5, S2213161.txt file added**
  #12 opened 7 hours ago
- **added S1812165.txt**
  #13 opened 2 hours ago
- **Added S2213401**
  #14 opened 2 hours ago
- **Pull request to add student ID - S1813163**
  #15 opened 2 hours ago



b) When was the last time README.mdwas modified? (Hint: use git logwith an argument).

>>> Aug 31st 09:59:14 was the last time of modification



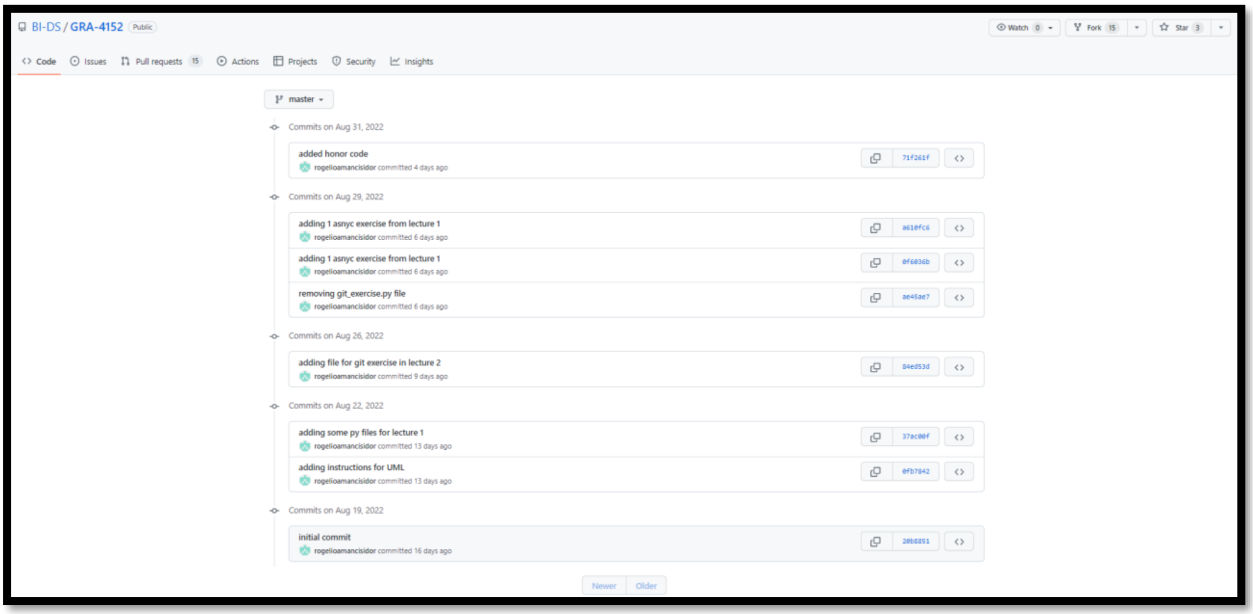
```
PS C:\Users\prati\OneDrive\Documents\BI\OOP\GRA-4152> git log -1 README.md
commit 71f261f8dbb09c828dfd2be1ad664a14b1fbc498 (HEAD -> master, origin/master, origin/HEAD)
Author: rogelioandrade <rogelio.a.mancisidor@bi.no>
Date:   Wed Aug 31 09:59:14 2022 +0200

    added honor code
PS C:\Users\prati\OneDrive\Documents\BI\OOP\GRA-4152>
```

c) What was the commit message associated with the last modification to the README.md? (Hint: use git blame and git show)

>>> added honor code

2 methods as follows to find out. 1st method checking the commit history on github



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Commits on Aug 31, 2022

added honor code
rogelioamancisidor committed 4 days ago — 71f261f

Commits on Aug 29, 2022

adding 1 asnyc exercise from lecture 1
rogelioamancisidor committed 6 days ago — a610fc6

adding 1 asnyc exercise from lecture 1
rogelioamancisidor committed 6 days ago — 0f6036b

removing git_exercise.py file
rogelioamancisidor committed 6 days ago — ae45ae7

Commits on Aug 26, 2022

adding file for git exercise in lecture 2
rogelioamancisidor committed 9 days ago — 84ed53d

Commits on Aug 22, 2022

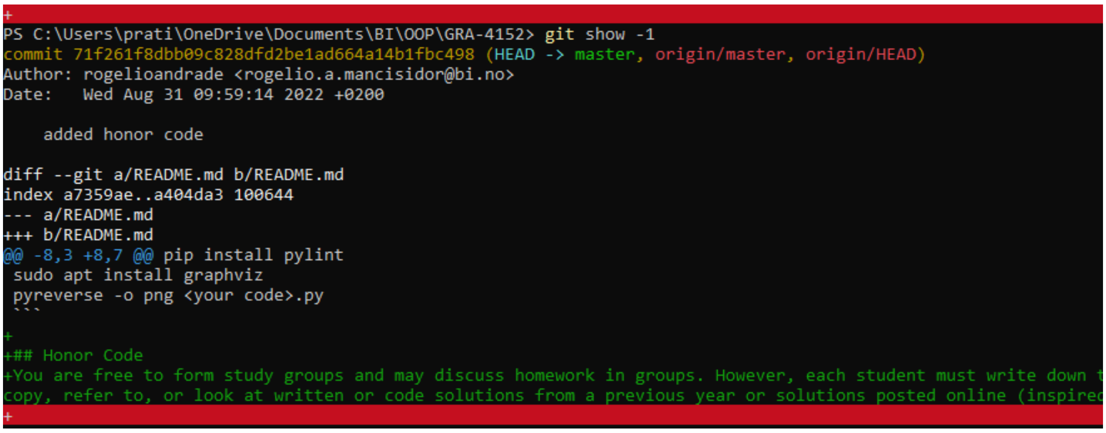
adding some py files for lecture 1
rogelioamancisidor committed 13 days ago — 37ac00f

adding instructions for UML
rogelioamancisidor committed 13 days ago — 0fb7842

Commits on Aug 19, 2022

initial commit
rogelioamancisidor committed 16 days ago — 20b8851

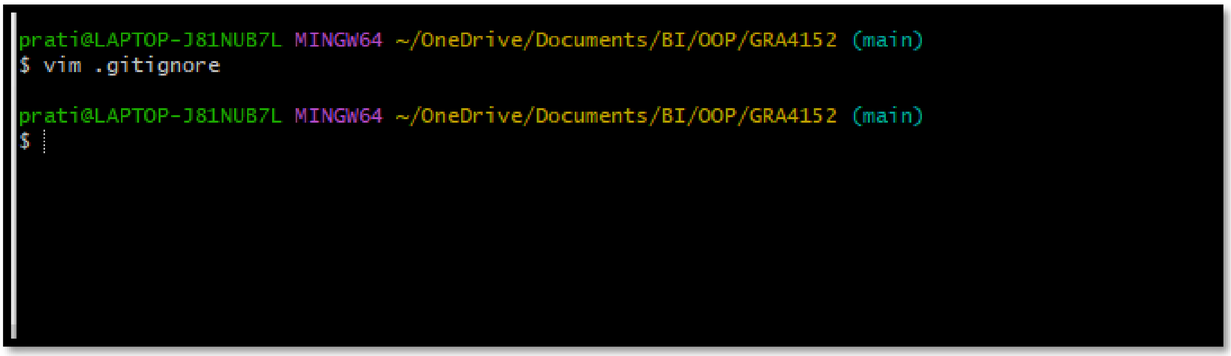
2nd method : using git show -1 as shown below



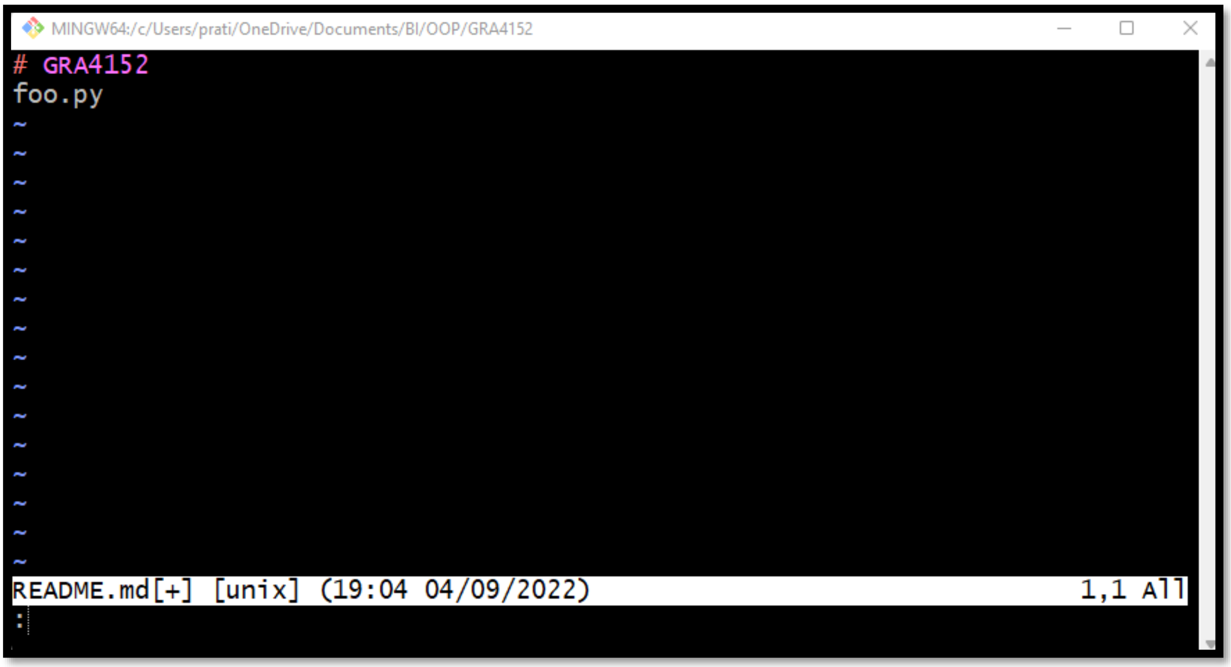
~~~
+
PS C:\Users\prati\OneDrive\Documents\BI\OOP\GRA-4152> git show -1
commit 71f261f8dbb09c828dfd2be1ad664a14b1fbc498 (HEAD -> master, origin/master, origin/HEAD)
Author: rogelioandrade <rogelio.a.mancisidor@bi.no>
Date:   Wed Aug 31 09:59:14 2022 +0200

    added honor code

diff --git a/README.md b/README.md
index a7359ae..a404da3 100644
--- a/README.md
+++ b/README.md
@@ -8,3 +8,7 @@ pip install pylint
 sudo apt install graphviz
 pyreverse -o png <your code>.py
 ```
+
+## Honor Code
+You are free to form study groups and may discuss homework in groups. However, each student must write down t
copy, refer to, or look at written or code solutions from a previous year or solutions posted online (inspirec
+
~~~

2) Adda .gitignorefile to your portfolio code repository (https://github.com/SXXXXXXX/GRA4152)and exclude files and/or folders.You might need to create a foo.py file to be excluded.

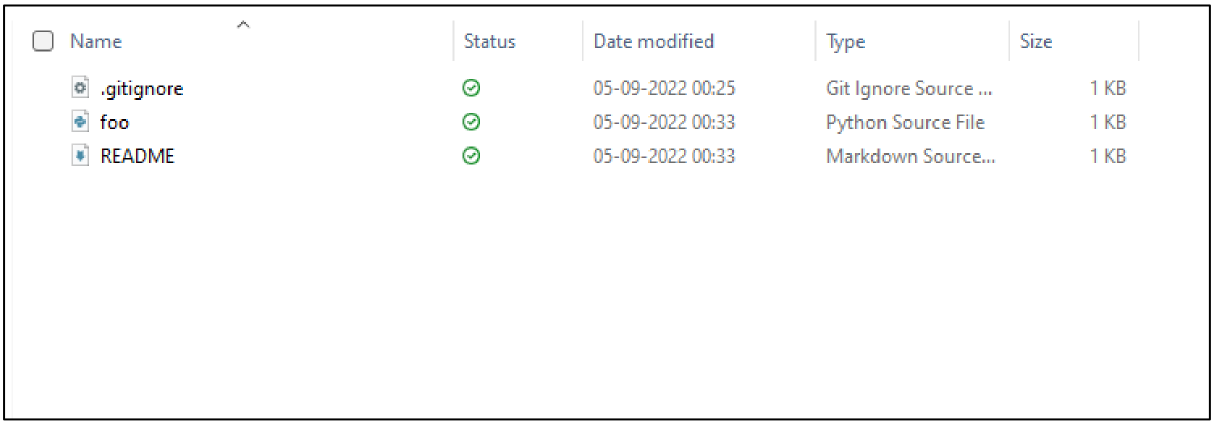
Please see the below 3 screengrabs



```
prati@LAPTOP-J81NUB7L MINGW64 ~/OneDrive/Documents/BI/OOP/GRA4152 (main)
$ vim .gitignore

prati@LAPTOP-J81NUB7L MINGW64 ~/OneDrive/Documents/BI/OOP/GRA4152 (main)
$
```



```
# GRA4152
foo.py
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
README.md[+] [unix] (19:04 04/09/2022)                    1,1 All
:
```



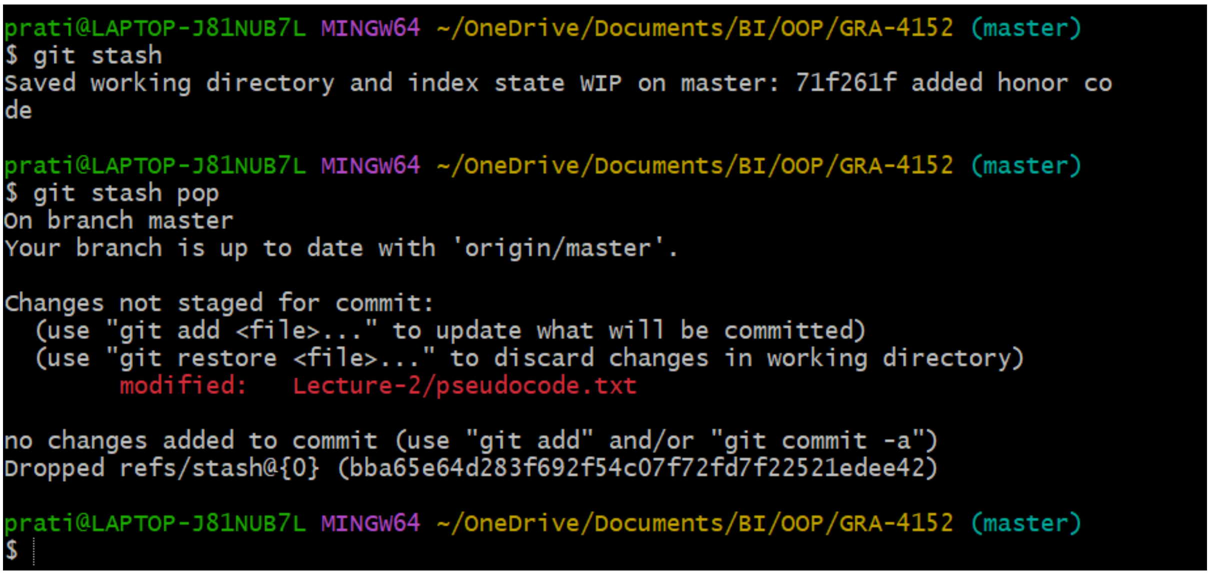
Name	Status	Date modified	Type	Size
.gitignore	✓	05-09-2022 00:25	Git Ignore Source ...	1 KB
foo	✓	05-09-2022 00:33	Python Source File	1 KB
README	✓	05-09-2022 00:33	Markdown Source...	1 KB

3) Clone some repository from GitHub and modify one of its existing files. What happens when you type git stash? What do you see when running git log --all --oneline? Run git stash popto undo what you did with git stash. In what scenario might this be useful? List your current stashes and delete them with git stash drop <stash_id>Now, modify a fileand stash changes. Make a new modification to the same file, but   this time commit those changes. What happens if you type git stash popand open thefile that you have modified? What do you see in the file?

>>> Cloned https://github.com/BI-DS/GRA-4152 and modified one of the files

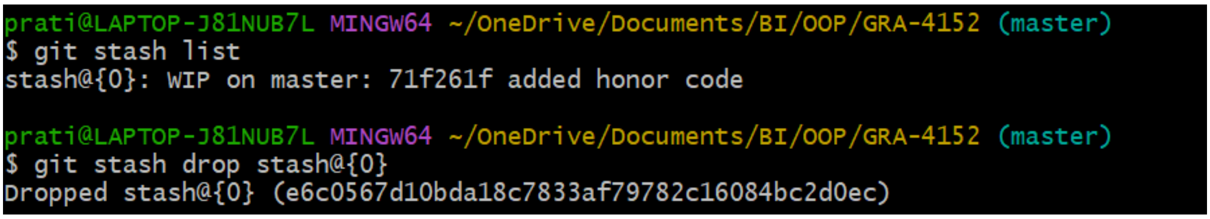
The git stash command shelves changes made to the working copy so I can do another work and then come back and re-apply them.

Applying git stash and git stash pop as shown below:



```
prati@LAPTOP-J81NUB7L MINGW64 ~/OneDrive/Documents/BI/OOP/GRA-4152 (master)
$ git stash
Saved working directory and index state WIP on master: 71f261f added honor co
de

prati@LAPTOP-J81NUB7L MINGW64 ~/OneDrive/Documents/BI/OOP/GRA-4152 (master)
$ git stash pop
On branch master
Your branch is up to date with 'origin/master'.

Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory)
        modified:   Lecture-2/pseudocode.txt

no changes added to commit (use "git add" and/or "git commit -a")
Dropped refs/stash@{0} (bba65e64d283f692f54c07f72fd7f22521edee42)

prati@LAPTOP-J81NUB7L MINGW64 ~/OneDrive/Documents/BI/OOP/GRA-4152 (master)
$
```

Listing all stash and dropping a particular stash

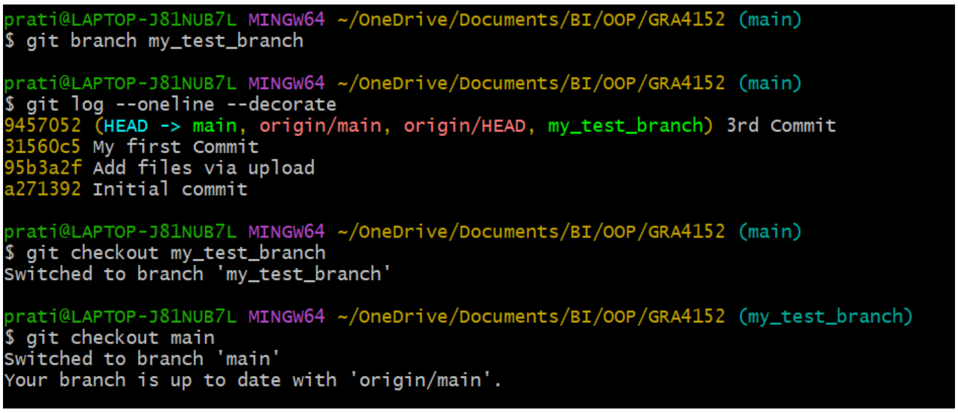


```
prati@LAPTOP-J81NUB7L MINGW64 ~/OneDrive/Documents/BI/OOP/GRA-4152 (master)
$ git stash list
stash@{0}: WIP on master: 71f261f added honor code

prati@LAPTOP-J81NUB7L MINGW64 ~/OneDrive/Documents/BI/OOP/GRA-4152 (master)
$ git stash drop stash@{0}
Dropped stash@{0} (e6c0567d10bda18c7833af79782c16084bc2d0ec)
```

4) Create a new branch in your class repository(https://github.com/ SXXXXXXX/GRA4152)and call it my_test_branch.Explore both branches, by switching back and forth. Add a comment line in any file in the branch my_test_branch, add andcommit your changes. Finally, merge my_test_branch into master

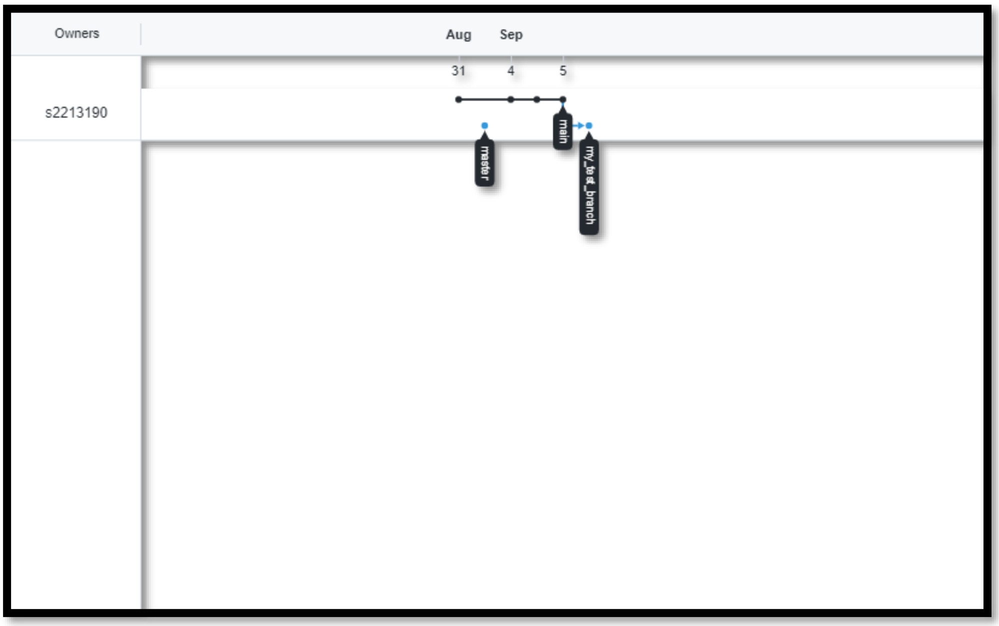
>>> Explored both branched using git status and git log.

Created and switched back and forth as shown in image below.

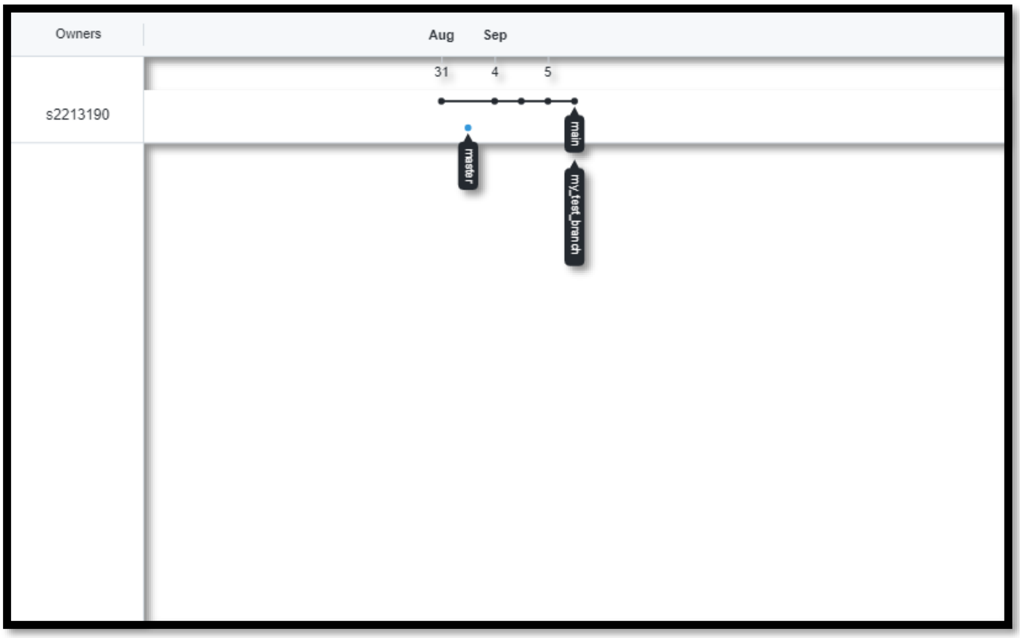


```
prati@LAPTOP-J81NUB7L MINGW64 ~/OneDrive/Documents/BI/OOP/GRA4152 (main)
$ git branch my_test_branch

prati@LAPTOP-J81NUB7L MINGW64 ~/OneDrive/Documents/BI/OOP/GRA4152 (main)
$ git log --oneline --decorate
9457052 (HEAD -> main, origin/main, origin/HEAD, my_test_branch) 3rd Commit
31560c5 My first Commit
95b3a2f Add files via upload
a271392 Initial commit

prati@LAPTOP-J81NUB7L MINGW64 ~/OneDrive/Documents/BI/OOP/GRA4152 (main)
$ git checkout my_test_branch
Switched to branch 'my_test_branch'

prati@LAPTOP-J81NUB7L MINGW64 ~/OneDrive/Documents/BI/OOP/GRA4152 (my_test_branch)
$ git checkout main
Switched to branch 'main'
Your branch is up to date with 'origin/main'.
```

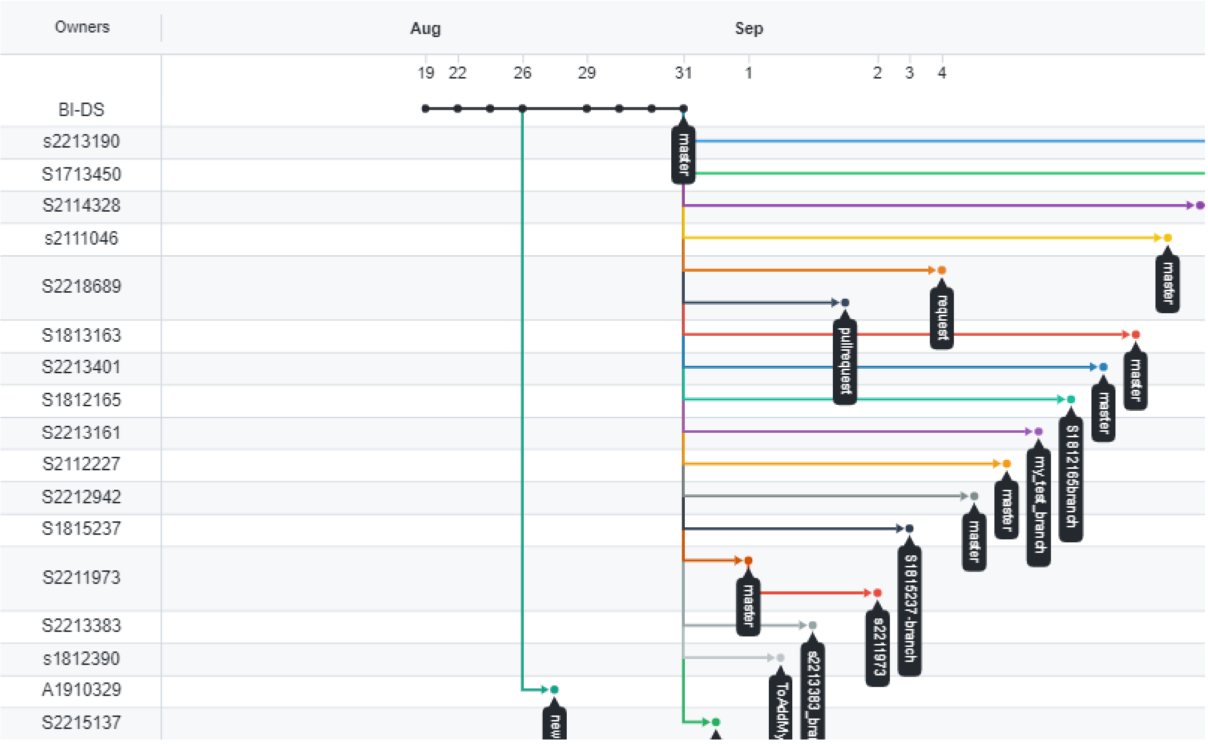
2 branches created and not merged



Merged Branches



5) Fork the class repository (https://github.com/BI-DS/GRA-4152) and clone it, so you can contribute to its development. Send me a pull request to add a text file with your student id, i.e. SXXXXXXX.txt.


Owners
Aug
Sep
19
22
26
29
31
1
2
3
4
BI-DS
s2213190
S1713450
S2114328
s2111046
S2218689
S1813163
S2213401
S1812165
S2213161
S2112227
S2212942
S1815237
S2211973
S2213383
s1812390
A1910329
S2215137
master
master
request
pullrequest
master
master
S1812165branch
my_test_branch
master
master
S1815237-branch
s2211973
master
s2213383_bra
ToAddMy
new