

Report SDT2 - GitHub

BLANCA MARÍA LORCA CÓRCOLES


a. create remote repository (at github, ...)

Create a new repository

A repository contains all project files, including the revision history. Already have a project repository elsewhere? [Import a repository.](#)

Required fields are marked with an asterisk ().*

Owner *

 **Shiroless** ▾

/

Repository name *


sdt2

✔ sdt2 is available.


Great repository names are short and memorable. Need inspiration? How about **upgraded-meme** ?

Description (optional)

☐

 **Public**
Anyone on the internet can see this repository. You choose who can commit.

☒

 **Private**
You choose who can see and commit to this repository.

Initialize this repository with:

☐ **Add a README file**
This is where you can write a long description for your project. [Learn more about READMEs.](#)

Add .gitignore


.gitignore template: **None** ▾

Choose which files not to track from a list of templates. [Learn more about ignoring files.](#)

Choose a license

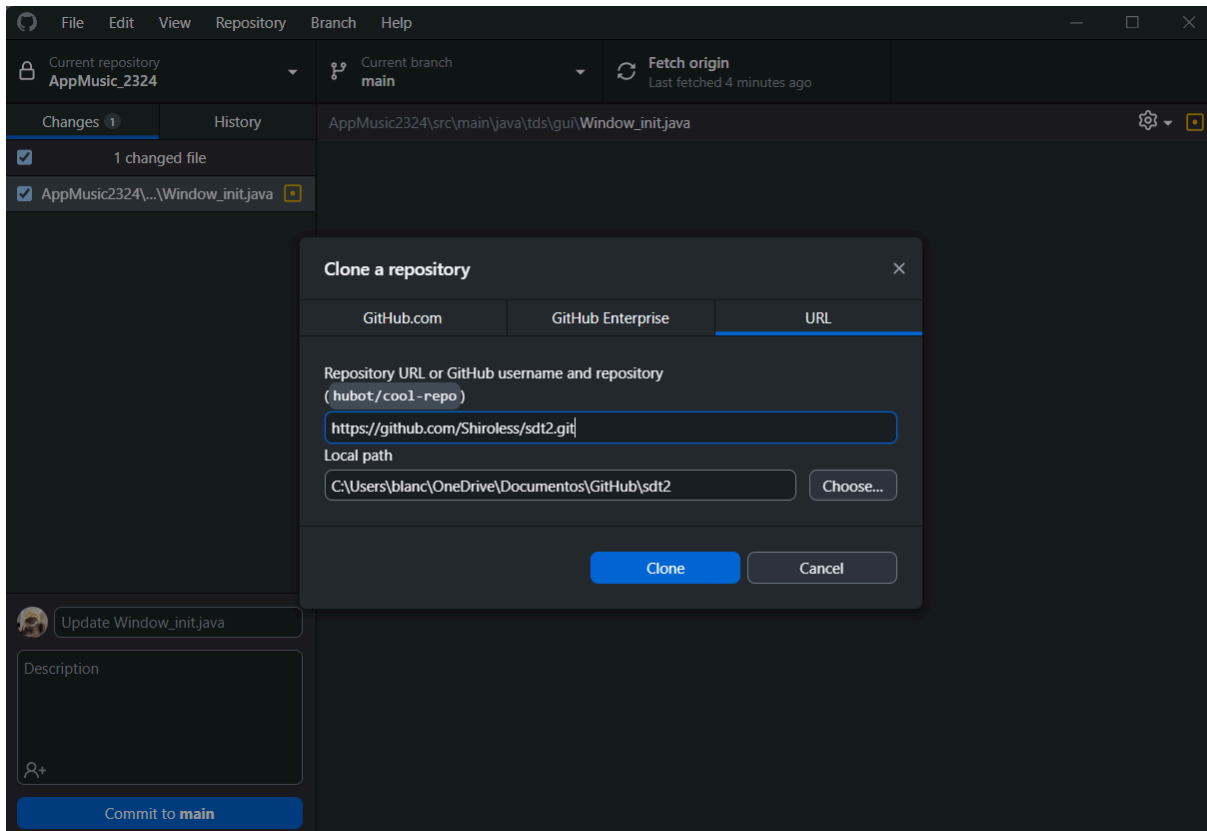
License: **None** ▾

A license tells others what they can and can't do with your code. [Learn more about licenses.](#)

 You are creating a private repository in your personal account.

Create repository

b. clone the empty repository (git clone)



- c. create in the local repo folder an empty project using the chosen language

New Java Project

Create a Java project in the workspace or in an external location.

Project name:

☐ Use default location

Location: [Browse...](#)

JRE

- ☒ Use an execution environment JRE:
- ☐ Use a project specific JRE:
- ☐ Use default JRE 'jre' and workspace compiler preferences [Configure JREs...](#)

Project layout

- ☐ Use project folder as root for sources and class files
- ☐ Create separate folders for sources and class files [Configure default...](#)

Working sets

☐ Add project to working sets [New...](#)

Working sets: [Select...](#)

Module

☒ Create module-info.java file

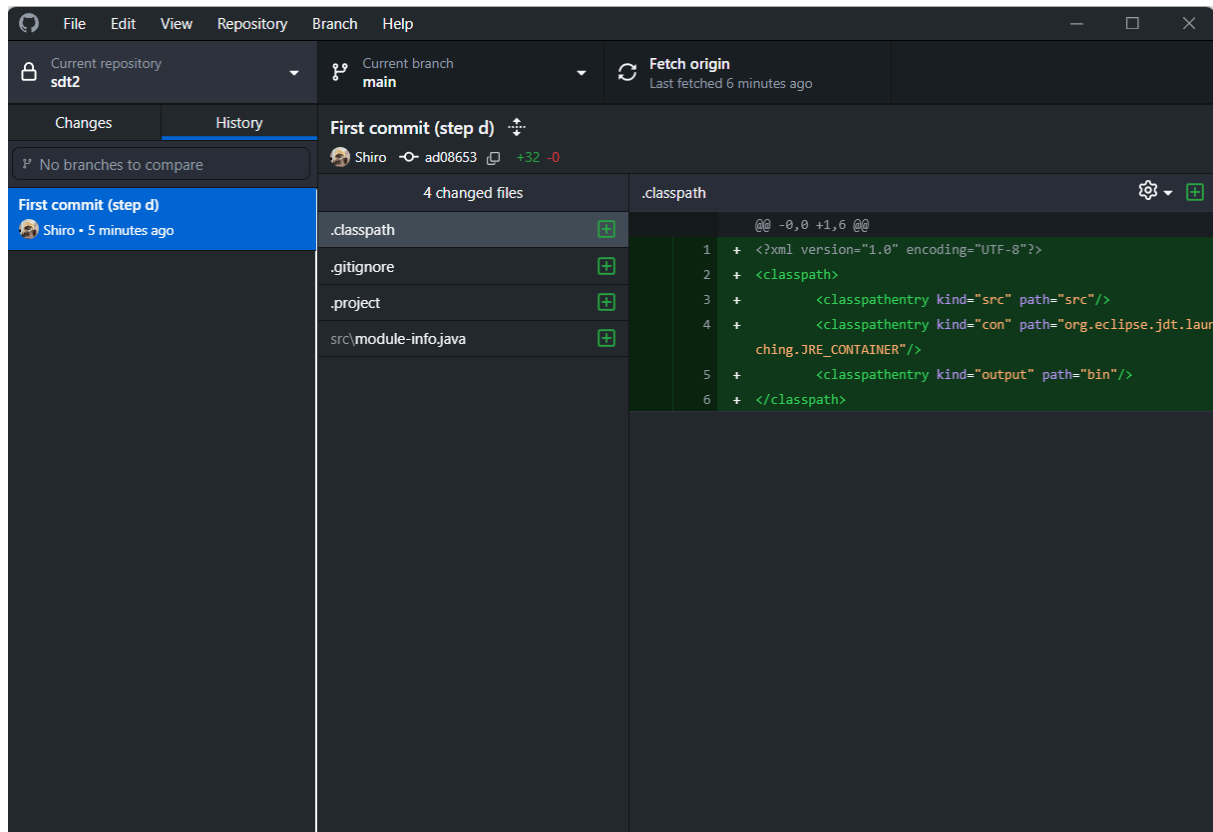
Module name:

☒ Generate comments

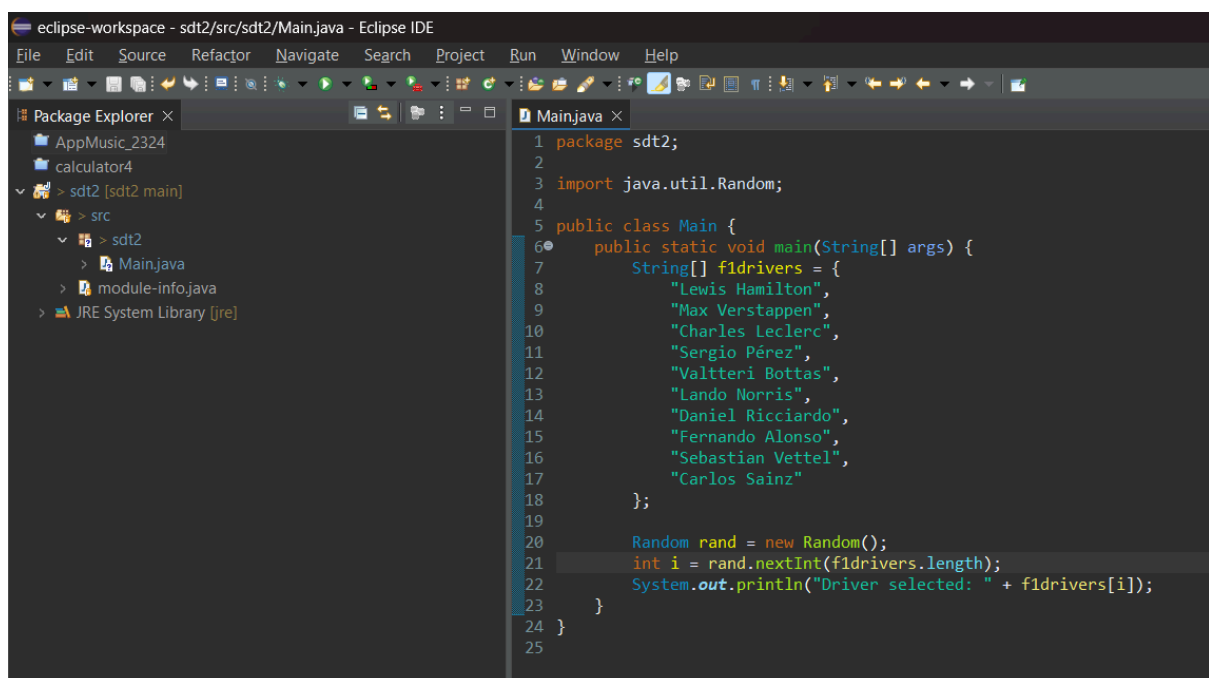
module name will be "sdt2" (if no module is specified, then project name will be used as module name)

[? < Back](#) [Next >](#) [Finish](#) [Cancel](#)

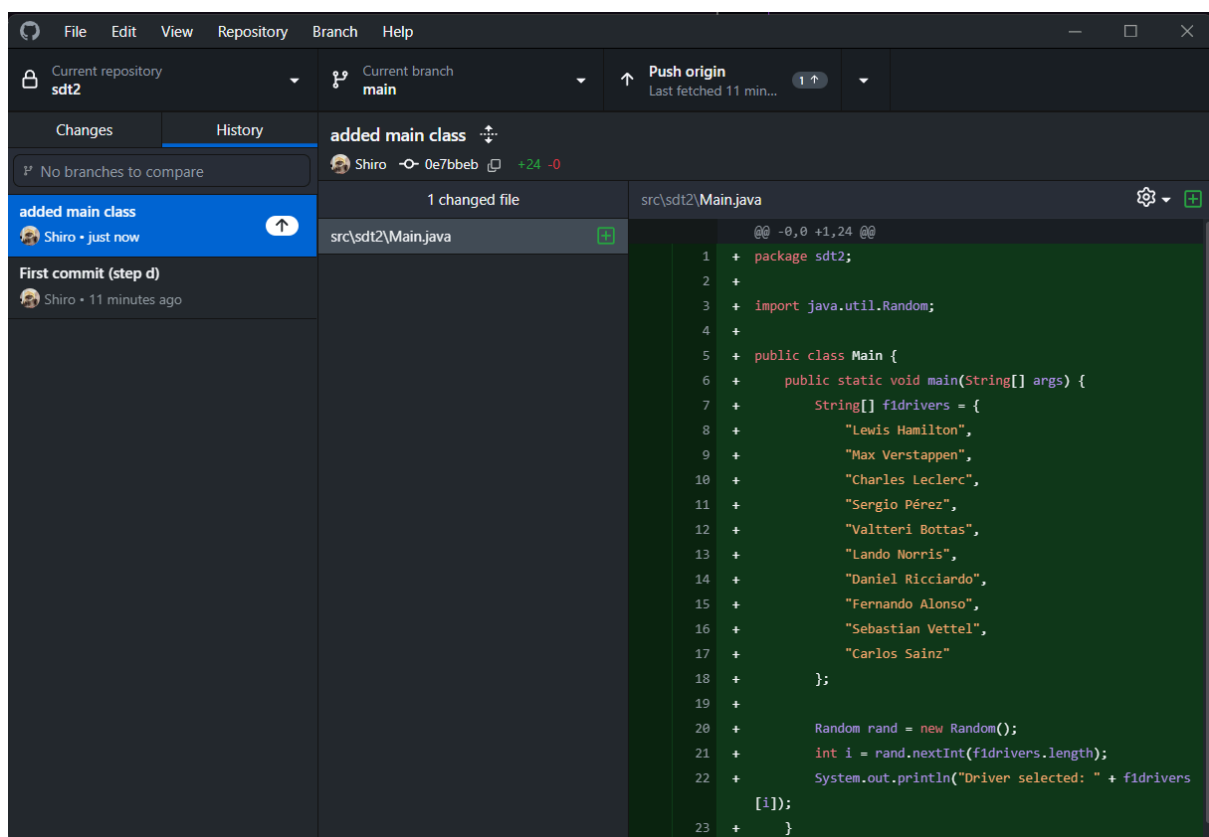
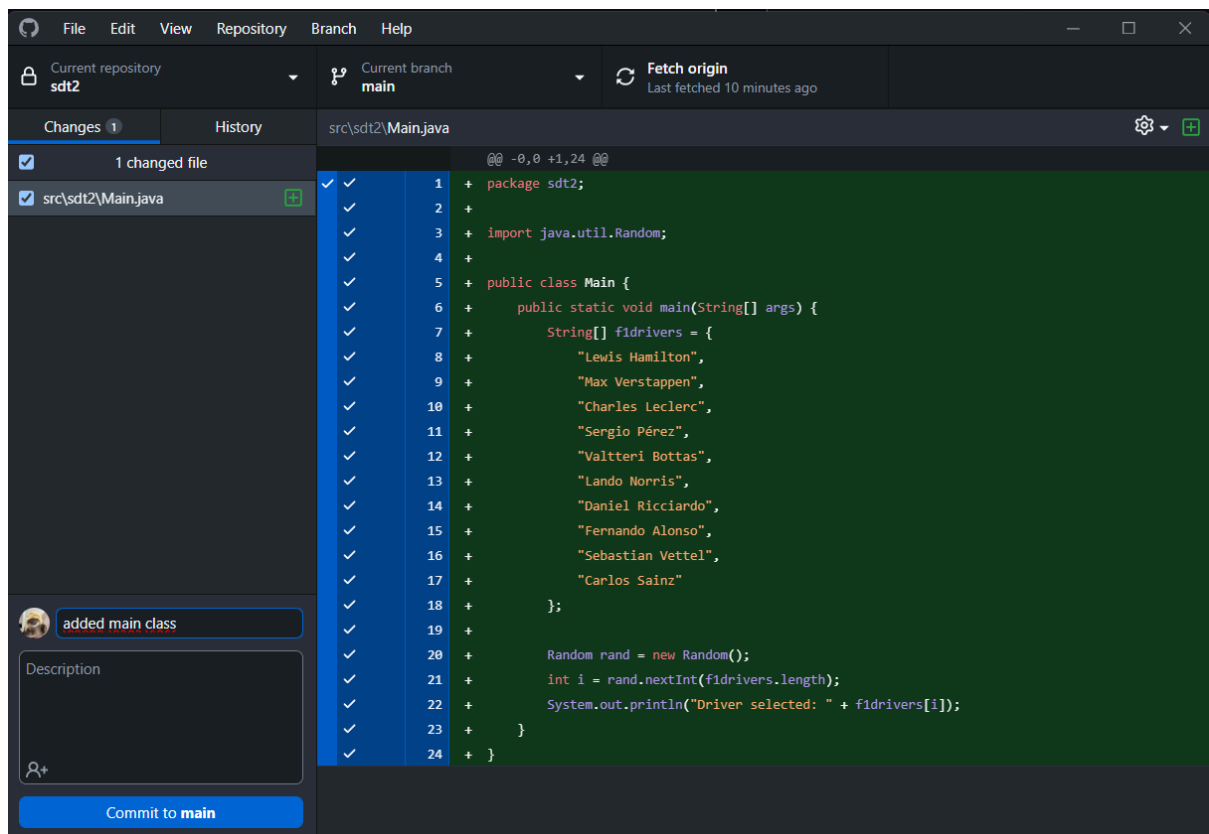
d. commit the whole project to the repo (git commit -m "message
...")



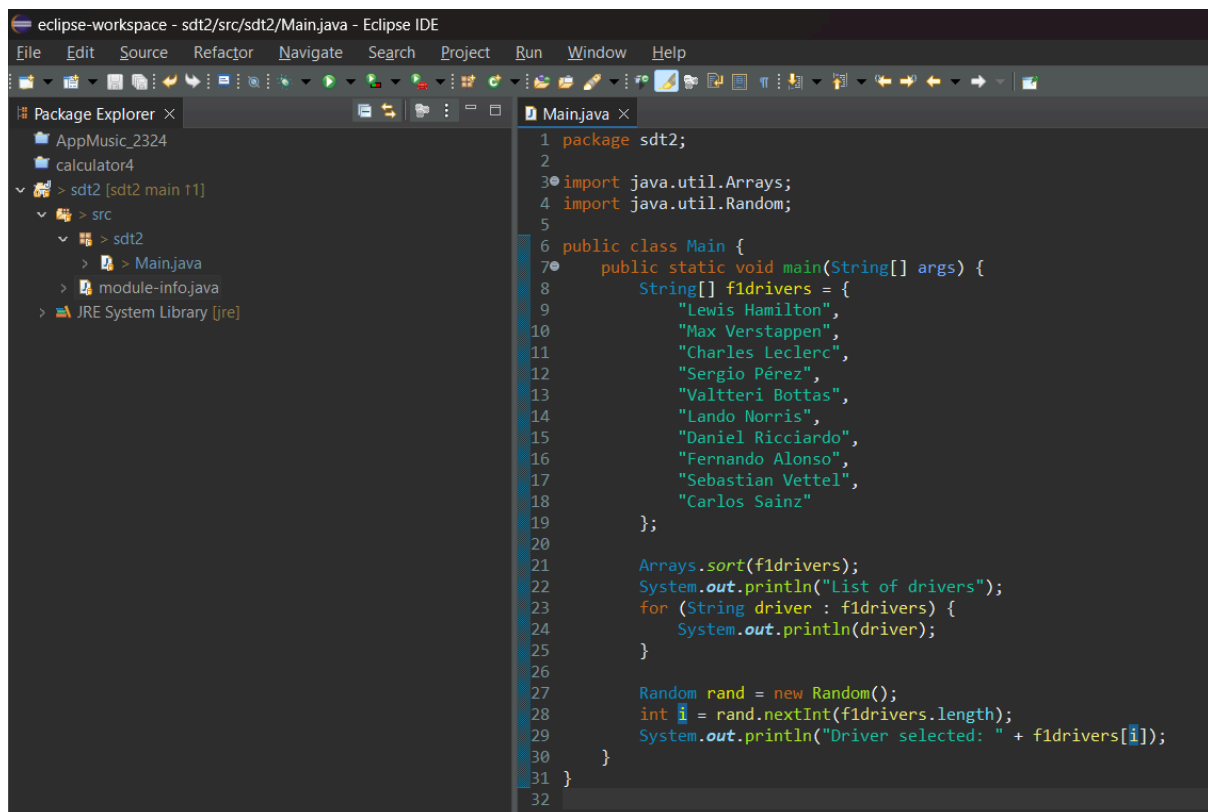
e. add simple code to the Java/C++/C# project (e.g. create table, write table elements)



f. commit changes

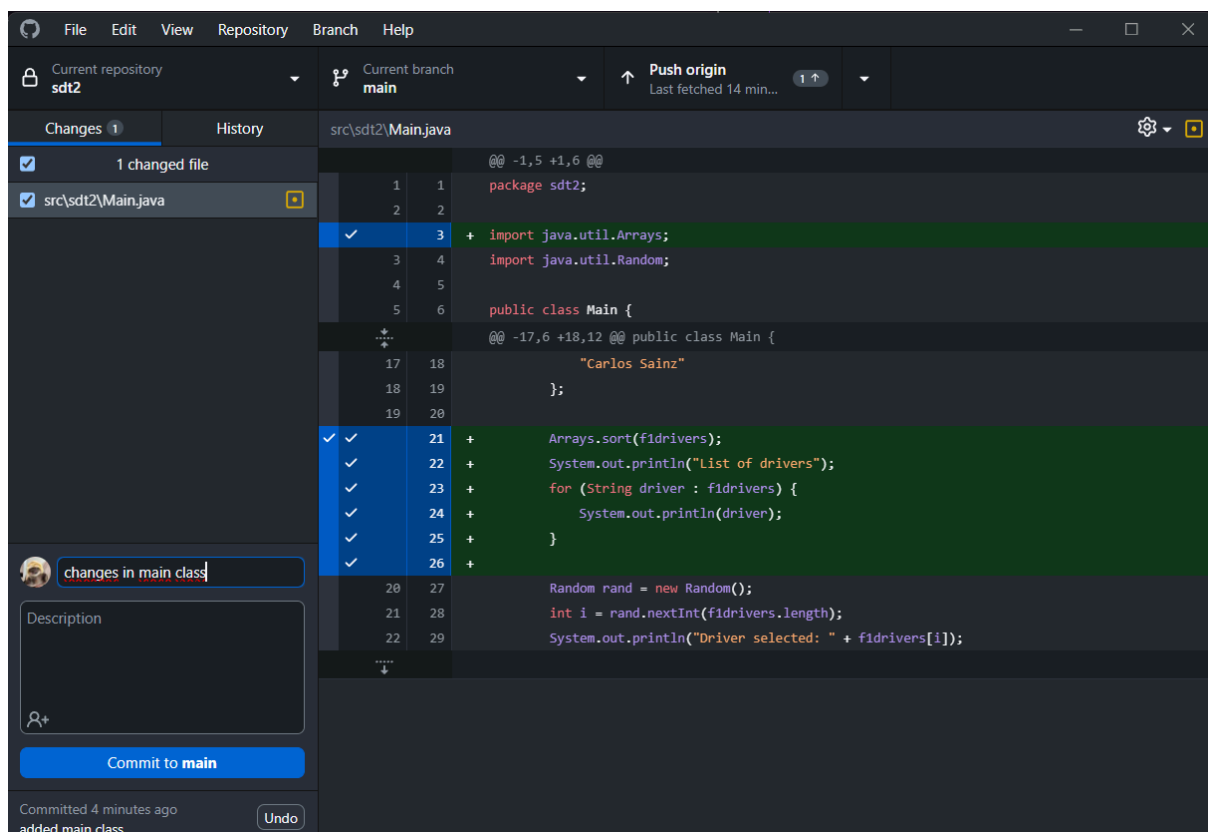


g. add more code (e.g. initialize table by random values)



```
1 package sdt2;
2
3 import java.util.Arrays;
4 import java.util.Random;
5
6 public class Main {
7     public static void main(String[] args) {
8         String[] f1drivers = {
9             "Lewis Hamilton",
10            "Max Verstappen",
11            "Charles Leclerc",
12            "Sergio Pérez",
13            "Valtteri Bottas",
14            "Lando Norris",
15            "Daniel Ricciardo",
16            "Fernando Alonso",
17            "Sebastian Vettel",
18            "Carlos Sainz"
19        };
20
21        Arrays.sort(f1drivers);
22        System.out.println("List of drivers");
23        for (String driver : f1drivers) {
24            System.out.println(driver);
25        }
26
27        Random rand = new Random();
28        int i = rand.nextInt(f1drivers.length);
29        System.out.println("Driver selected: " + f1drivers[i]);
30    }
31 }
32
```

h. commit changes



Current repository: sdt2
Current branch: main
Push origin (Last fetched 14 min...)

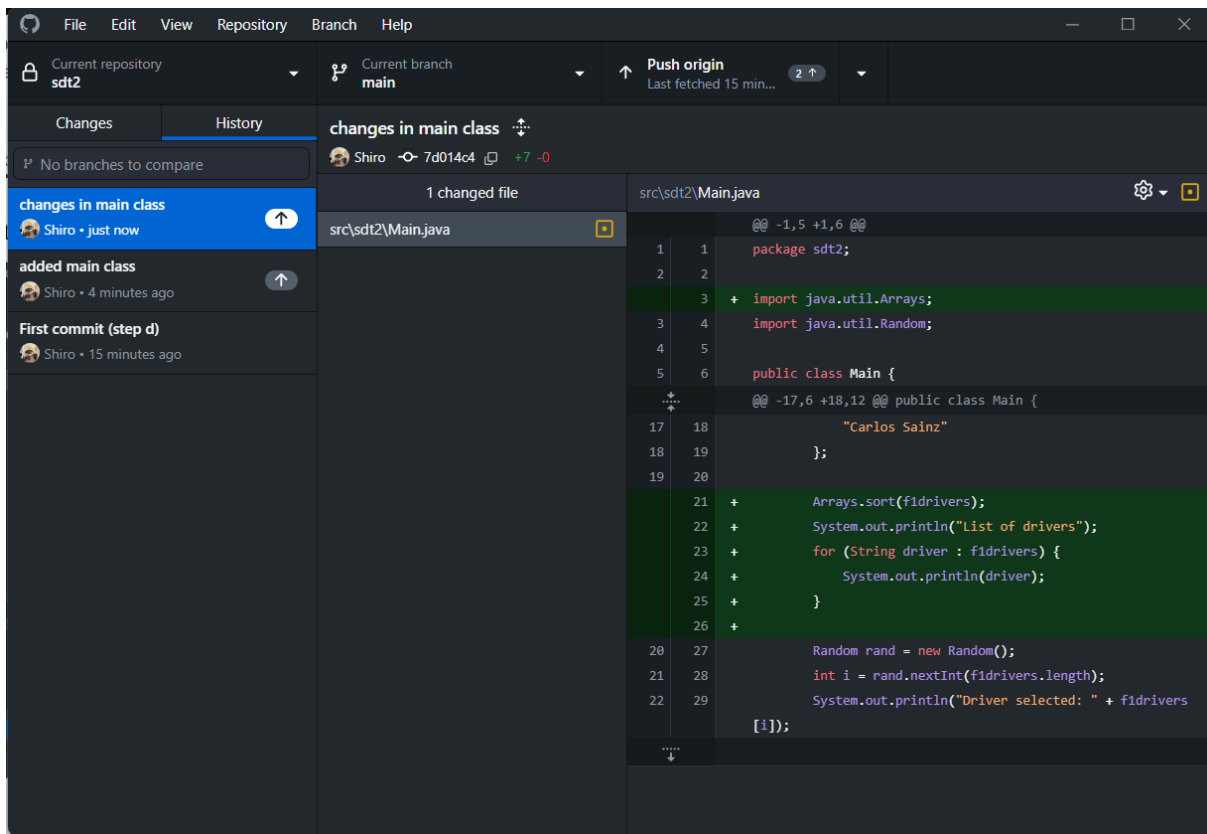
Changes: 1 changed file

File	Line	Change
src\sdt2\Main.java	1	package sdt2;
	2	
src\sdt2\Main.java	3	+ import java.util.Arrays;
	4	import java.util.Random;
src\sdt2\Main.java	5	
	6	public class Main {
src\sdt2\Main.java	17	@@ -17,6 +18,12 @@ public class Main {
	18	"Carlos Sainz"
src\sdt2\Main.java	18	};
	19	
src\sdt2\Main.java	21	+ Arrays.sort(f1drivers);
	22	+ System.out.println("List of drivers");
src\sdt2\Main.java	23	+ for (String driver : f1drivers) {
	24	System.out.println(driver);
src\sdt2\Main.java	25	};
	26	
src\sdt2\Main.java	27	Random rand = new Random();
	28	int i = rand.nextInt(f1drivers.length);
src\sdt2\Main.java	29	System.out.println("Driver selected: " + f1drivers[i]);
	30	

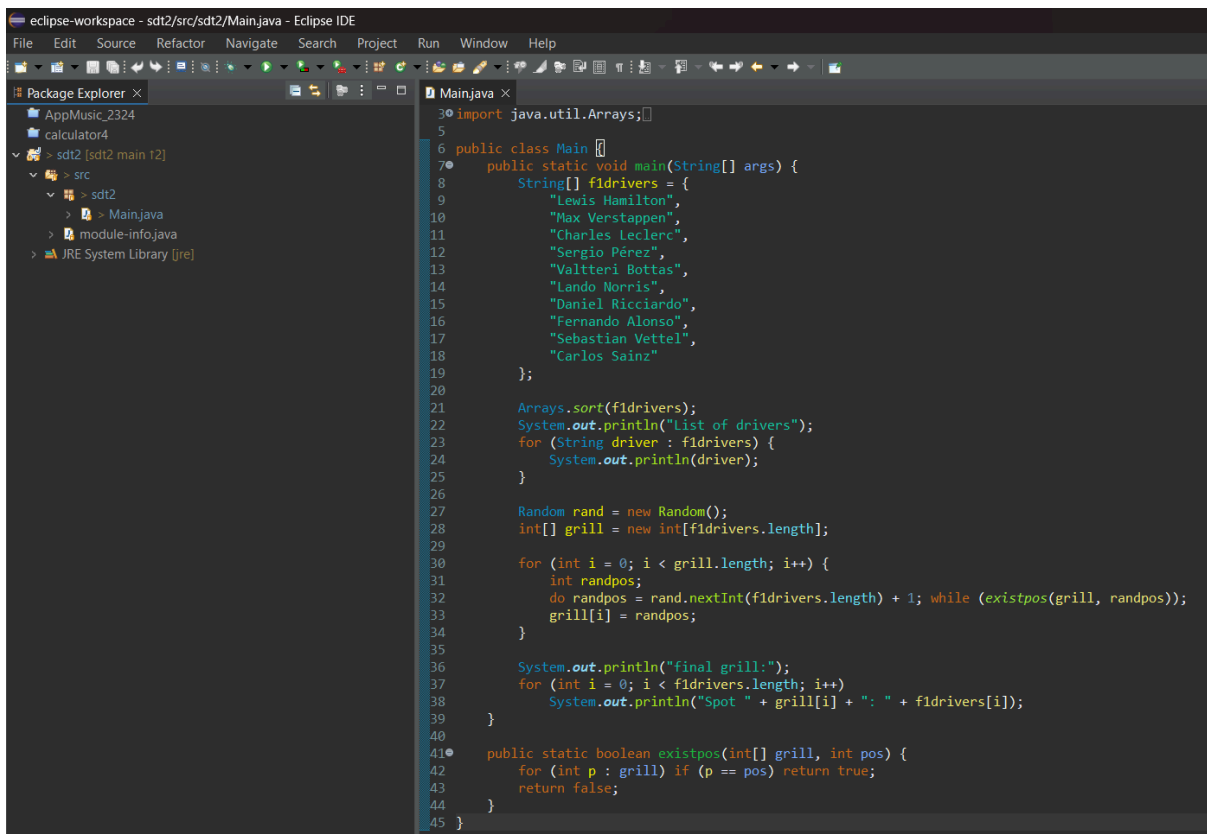
Commit message: changes in main class

Commit to main

Committed 4 minutes ago
added main class



i. add more code (e.g. sort table elements)



j. commit changes

The screenshot displays the IntelliJ IDEA interface during a commit process. The top bar shows the menu (File, Edit, View, Repository, Branch, Help) and the status of the current repository (sdt2), branch (main), and push origin. The left sidebar contains the 'Changes' and 'History' tabs. The 'Changes' tab is active, showing a list of changes: 'new changes in main class' (Shiro • just now), 'changes in main class' (Shiro • 27 minutes ago), 'added main class' (Shiro • 31 minutes ago), and 'First commit (step d)' (Shiro • 42 minutes ago). The 'History' tab is also visible, showing a list of commits. The main editor area displays the code for 'src\sdt2\Main.java'. The code is a Java class named 'Main' that generates a random grill of spots. The code is shown with line numbers and a diff view, indicating changes made to the file. The code includes a 'Random' object, a loop to generate a grill, and a method to check if a spot exists.

Current repository: sdt2
Current branch: main
Push origin: Last fetched 41 min... 3 ↑





Changes: No branches to compare

History: new changes in main class (Shiro • just now), changes in main class (Shiro • 27 minutes ago), added main class (Shiro • 31 minutes ago), First commit (step d) (Shiro • 42 minutes ago)

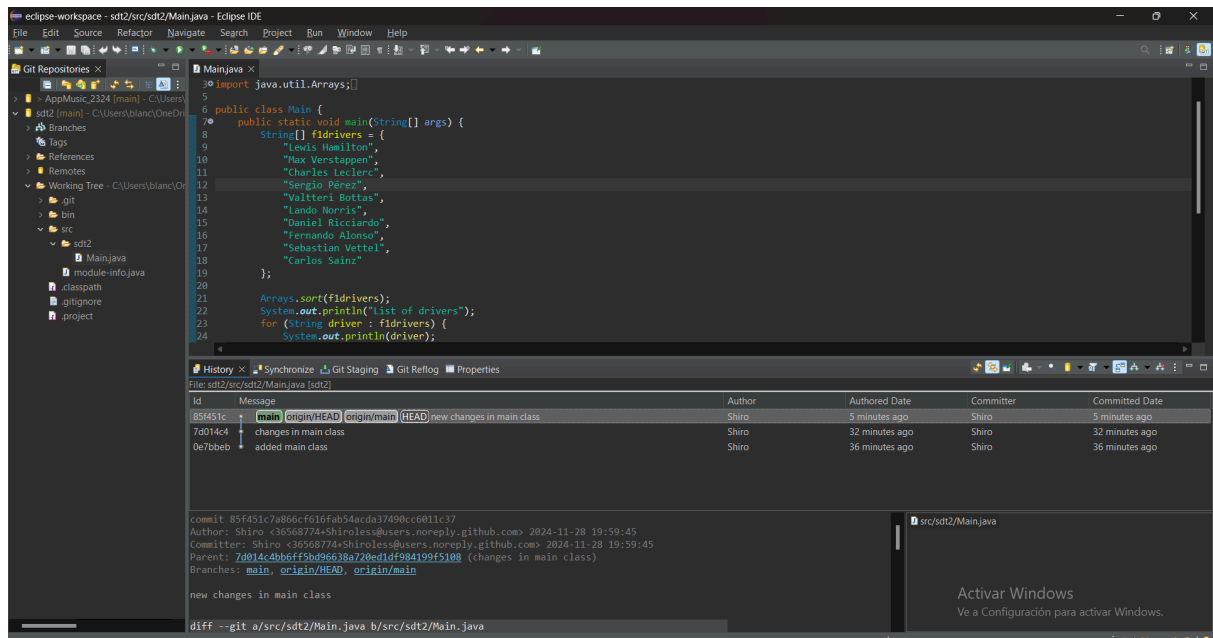
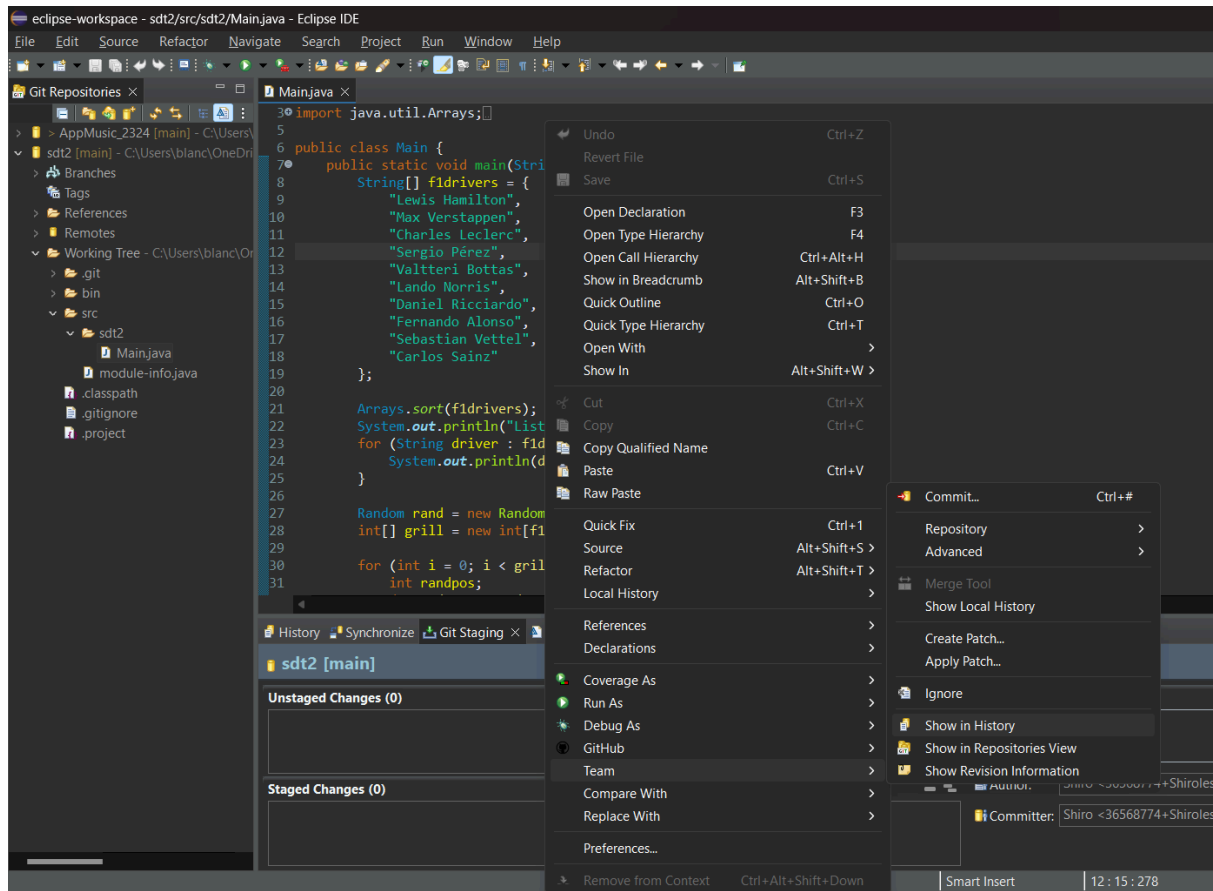
1 changed file: src\sdt2\Main.java

```
@@ -25,7 +25,21 @@ public class Main {  
    }  
    Random rand = new Random();  
    int i = rand.nextInt(fdrivers.length);  
    System.out.println("Driver selected: " + fdrivers  
        [i]);  
    int[] grill = new int[fdrivers.length];  
    for (int i = 0; i < grill.length; i++) {  
        int randpos;  
        do randpos = rand.nextInt(fdrivers.length) +  
            1; while (existpos(grill, randpos));  
        grill[i] = randpos;  
    }  
    System.out.println("final grill:");  
    for (int i = 0; i < fdrivers.length; i++)  
        System.out.println("Spot " + grill[i] + ": " +  
            fdrivers[i]);  
    }  
    public static boolean existpos(int[] grill, int pos) {  
        for (int p : grill) if (p == pos) return true;  
        return false;  
    }  
}
```

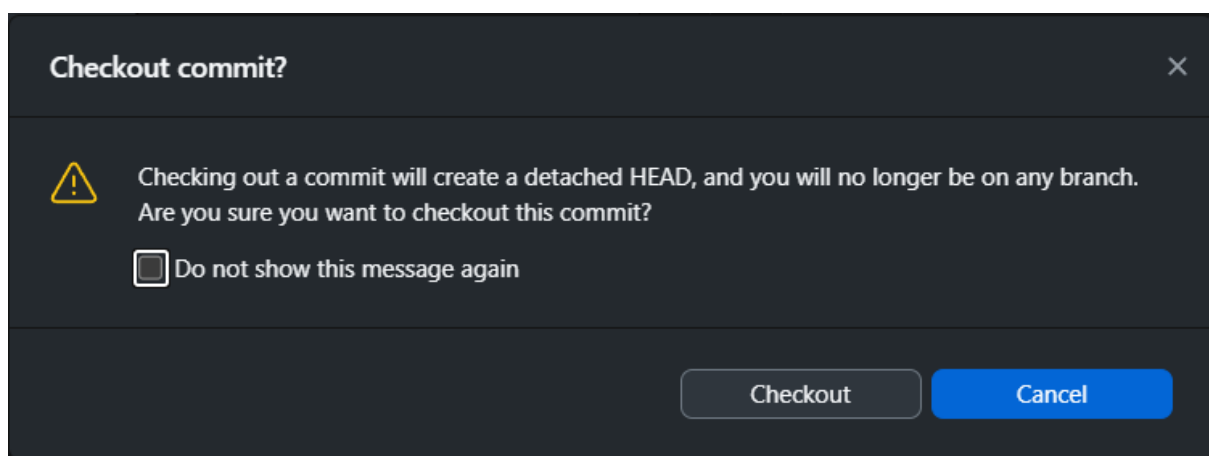
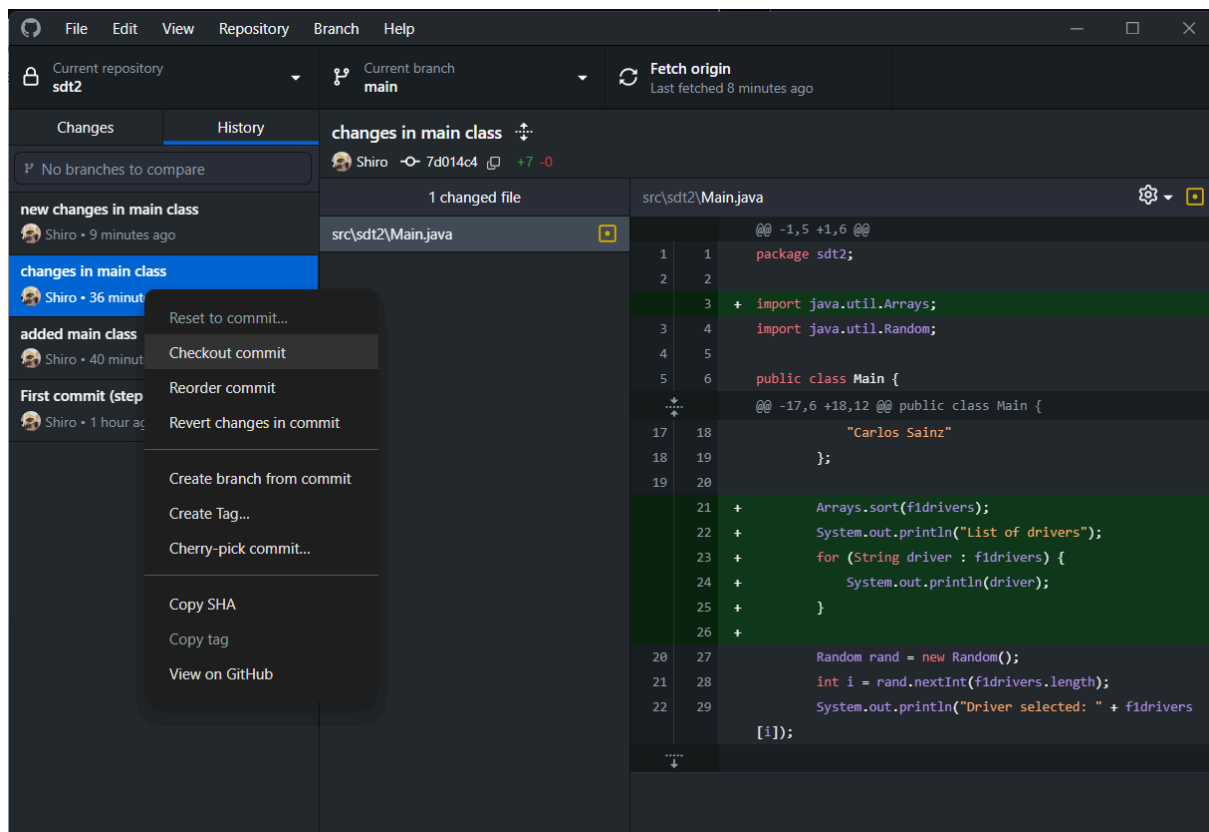

k. look at code history (git log)

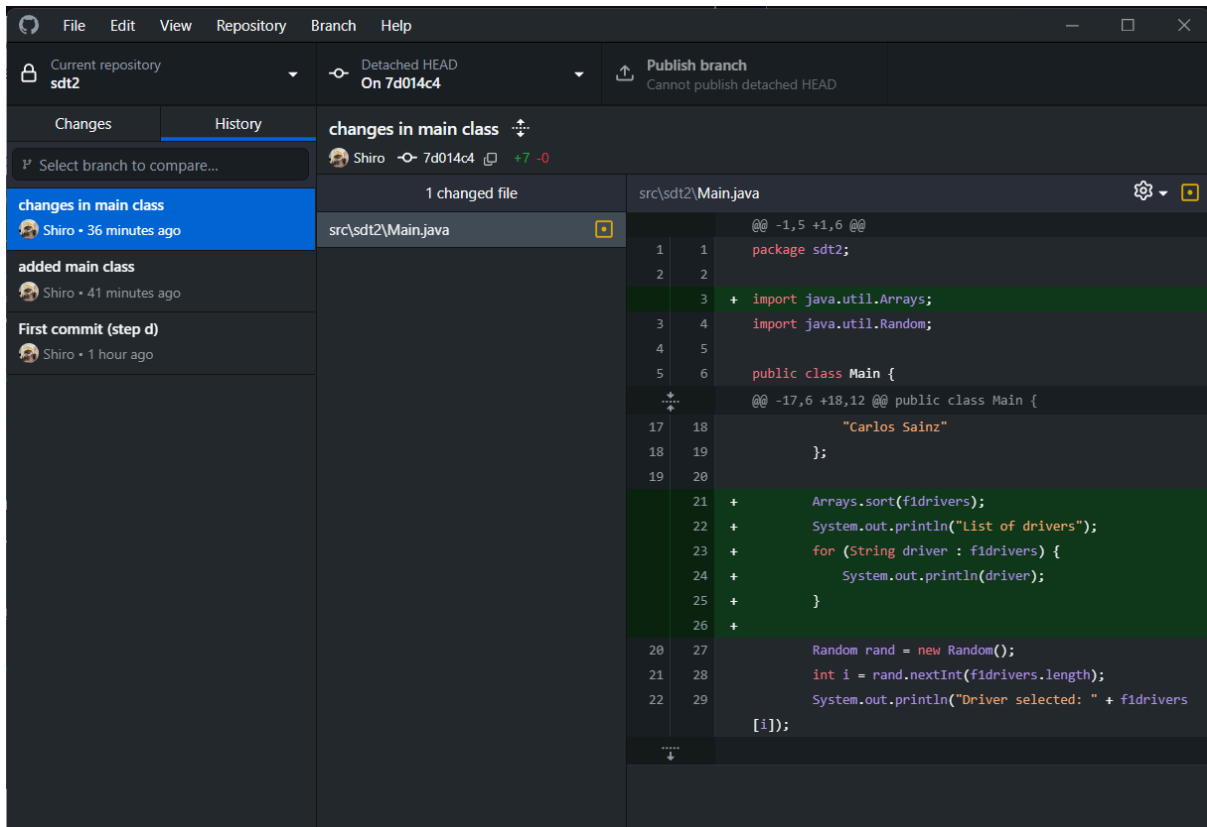
Changes	History
No branches to compare	
new changes in main class	
 Shiro • just now	
changes in main class	
 Shiro • 27 minutes ago	
added main class	
 Shiro • 32 minutes ago	
First commit (step d)	
 Shiro • 42 minutes ago	

1. look at code annotations (git blame)



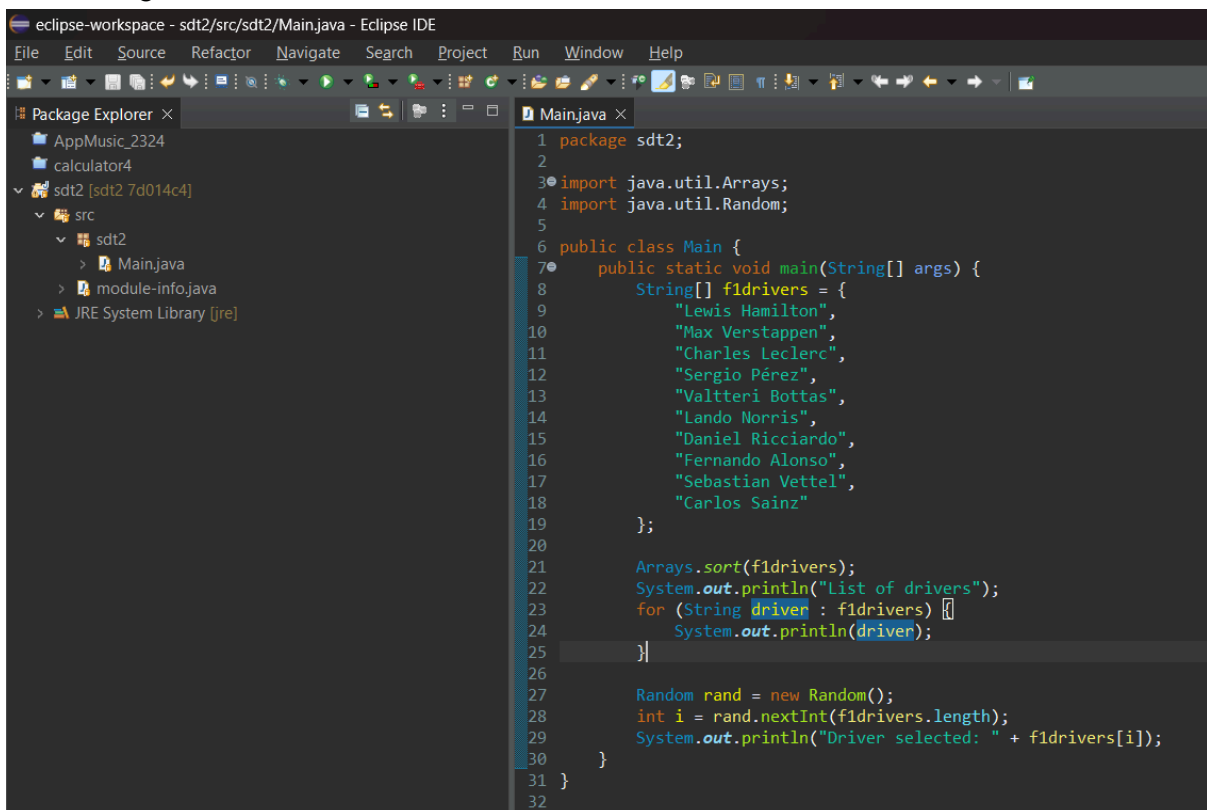
m. try to checkout different revisions (git checkout)



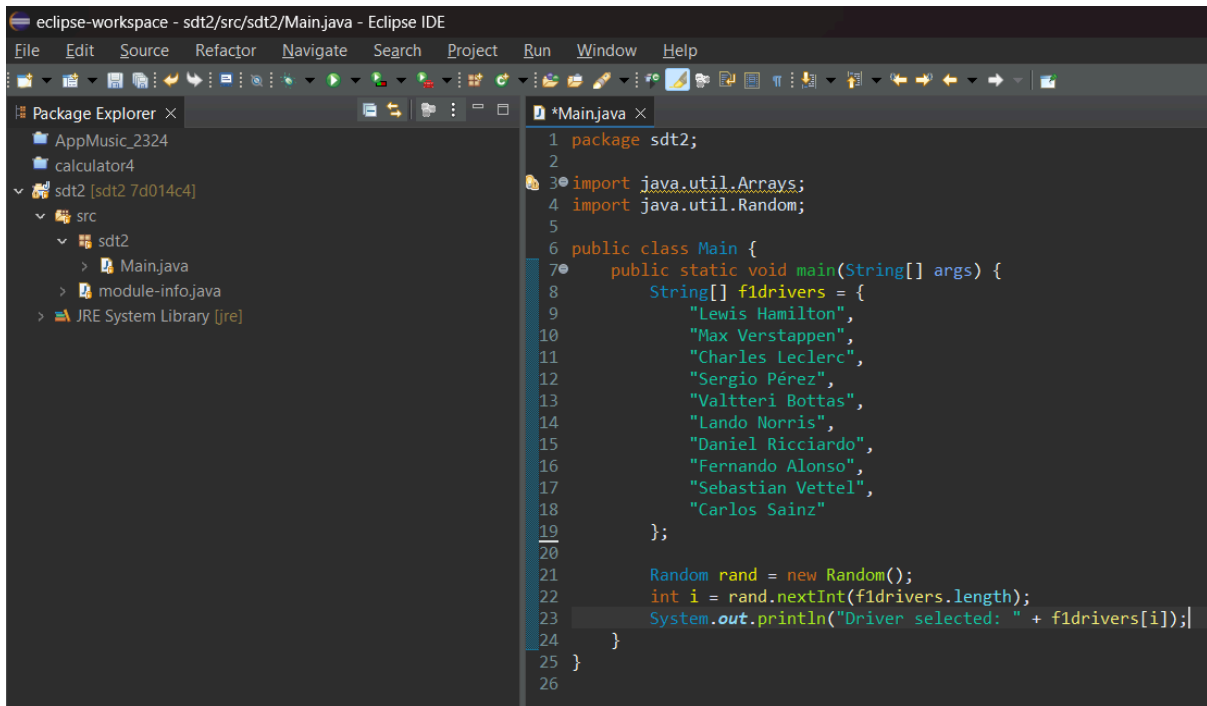


n. add any changes to the code, do not commit

before changes

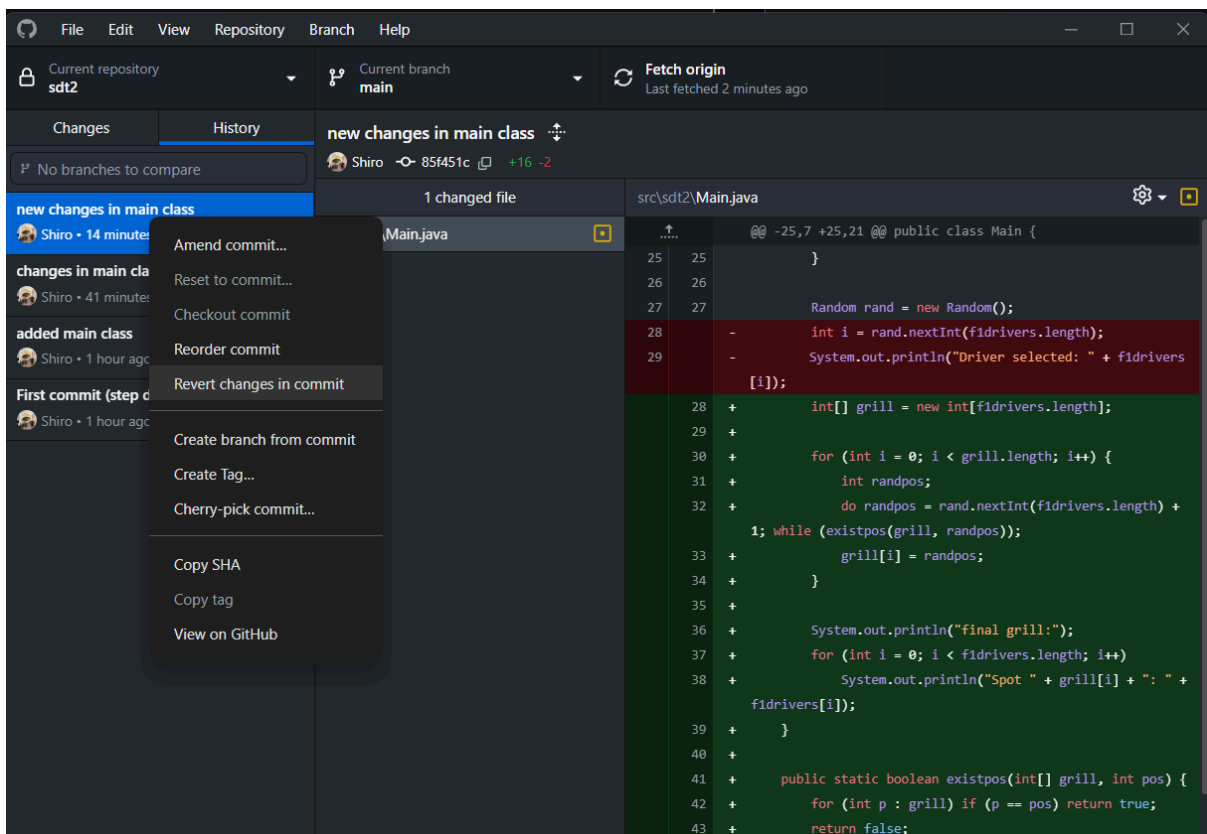


after changes

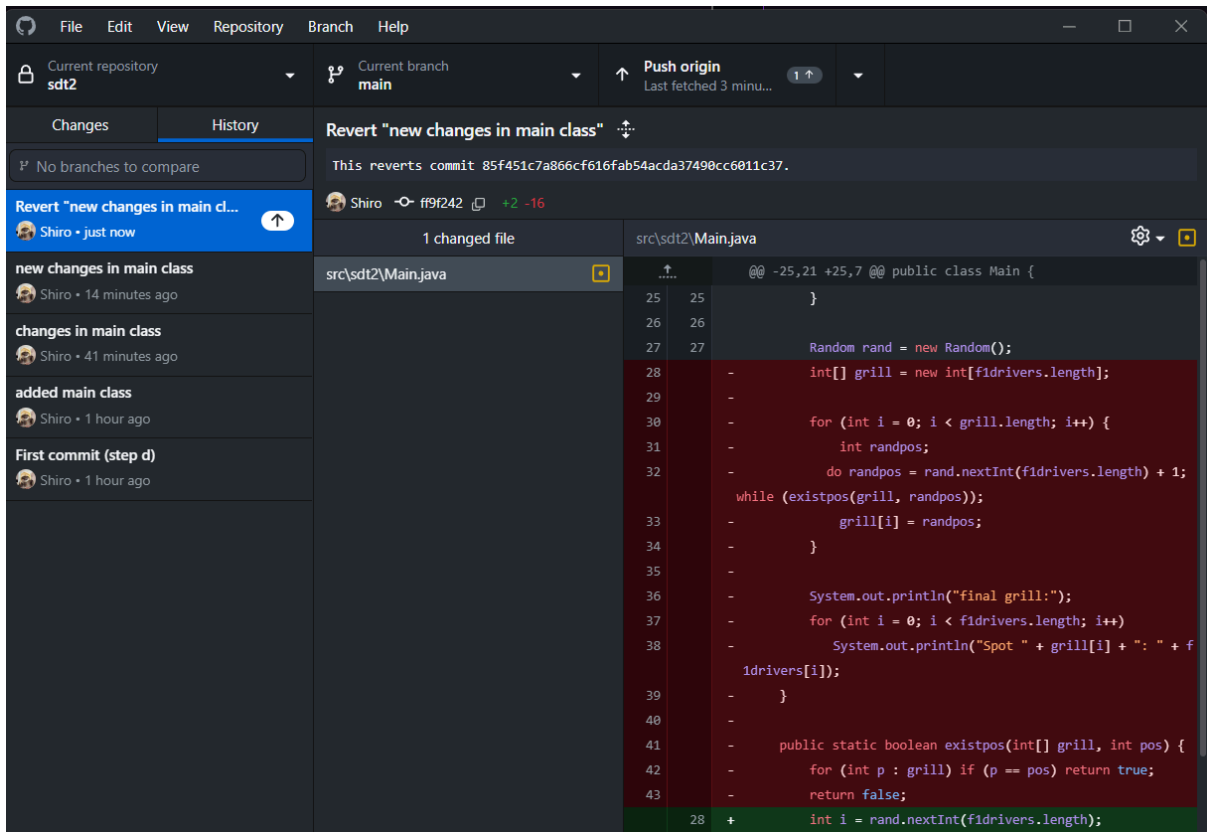


```
1 package sdt2;
2
3 import java.util.Arrays;
4 import java.util.Random;
5
6 public class Main {
7     public static void main(String[] args) {
8         String[] f1drivers = {
9             "Lewis Hamilton",
10            "Max Verstappen",
11            "Charles Leclerc",
12            "Sergio Pérez",
13            "Valtteri Bottas",
14            "Lando Norris",
15            "Daniel Ricciardo",
16            "Fernando Alonso",
17            "Sebastian Vettel",
18            "Carlos Sainz"
19        };
20
21        Random rand = new Random();
22        int i = rand.nextInt(f1drivers.length);
23        System.out.println("Driver selected: " + f1drivers[i]);
24    }
25 }
26
```

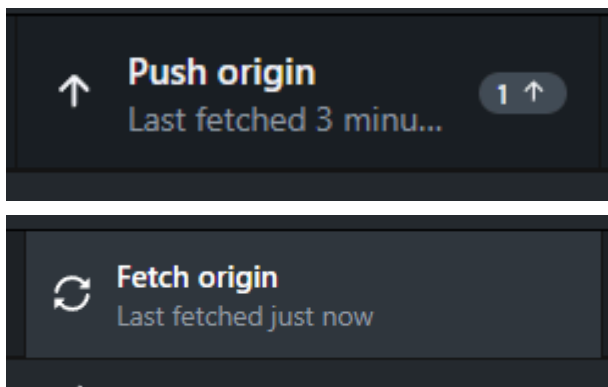
o. try to revert the last changes (git revert)



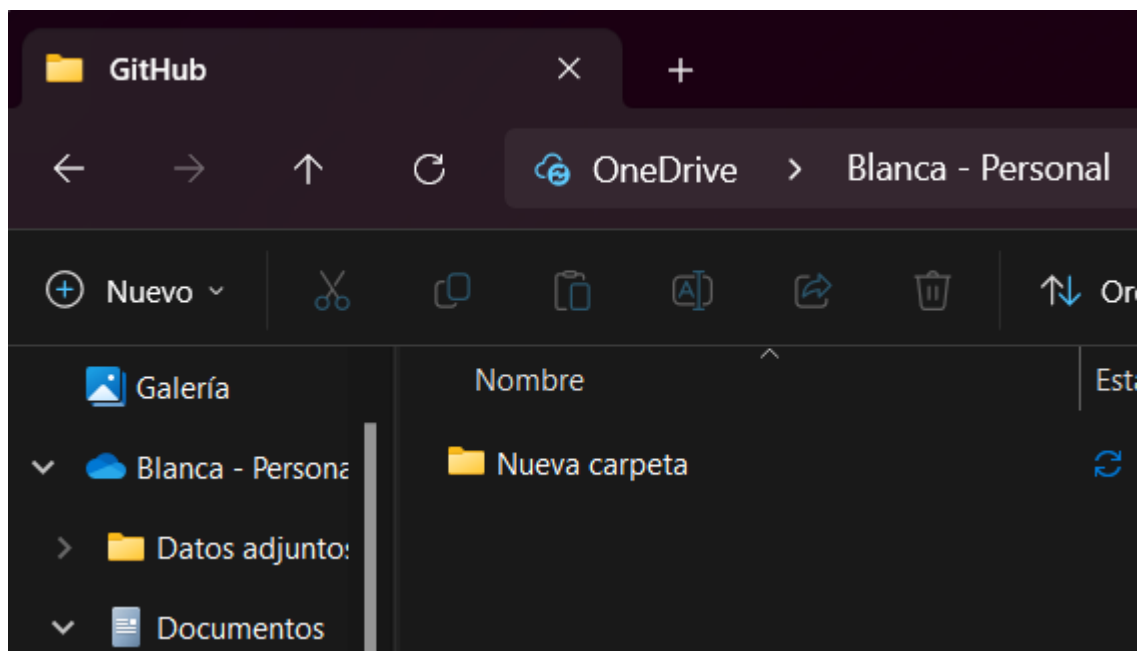
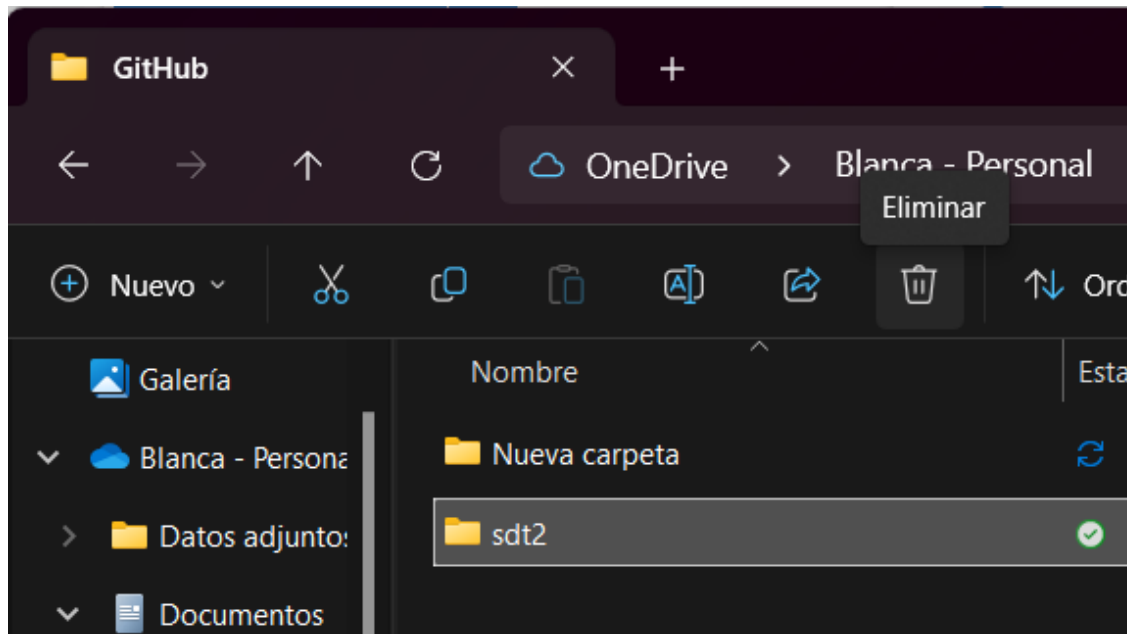
```
@@ -25,7 +25,21 @@ public class Main {
25 }
26
27 Random rand = new Random();
28 - int i = rand.nextInt(f1drivers.length);
29 - System.out.println("Driver selected: " + f1drivers
    [i]);
+
+ int[] grill = new int[f1drivers.length];
+
+ for (int i = 0; i < grill.length; i++) {
+     int randpos;
+     do randpos = rand.nextInt(f1drivers.length) +
1; while (existpos(grill, randpos));
+     grill[i] = randpos;
+ }
+
+ System.out.println("final grill:");
+ for (int i = 0; i < f1drivers.length; i++)
+     System.out.println("Spot " + grill[i] + ": " +
f1drivers[i]);
+ }
+
+ public static boolean existpos(int[] grill, int pos) {
+     for (int p : grill) if (p == pos) return true;
+     return false;
+ }
```

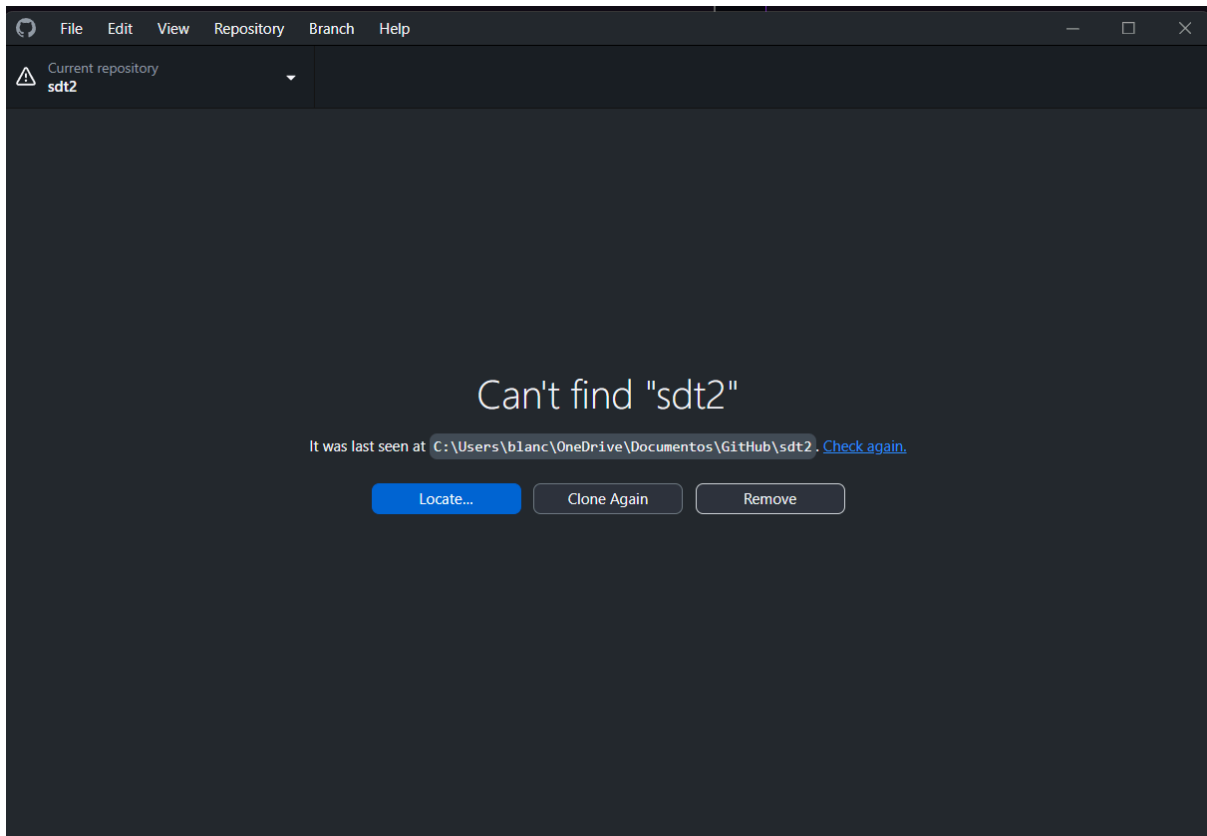


p. push the project to the remote repo (git push)

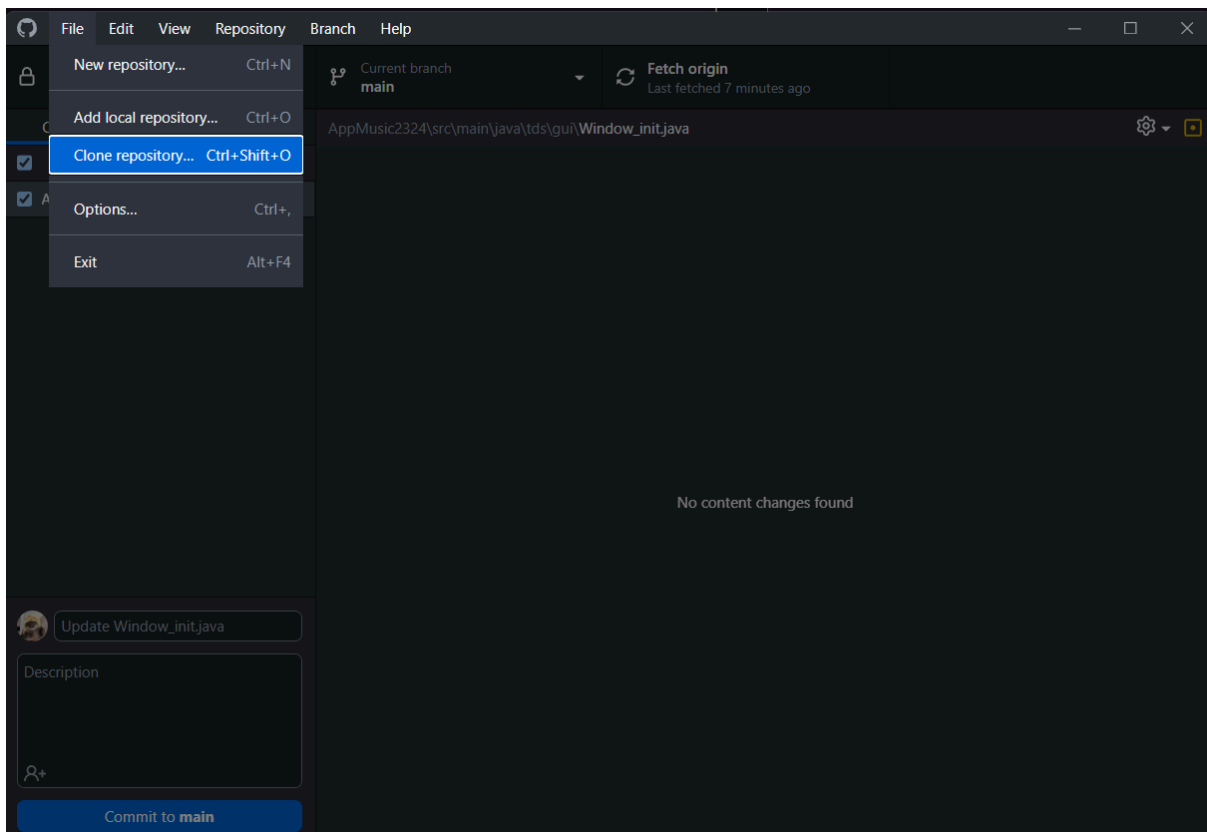


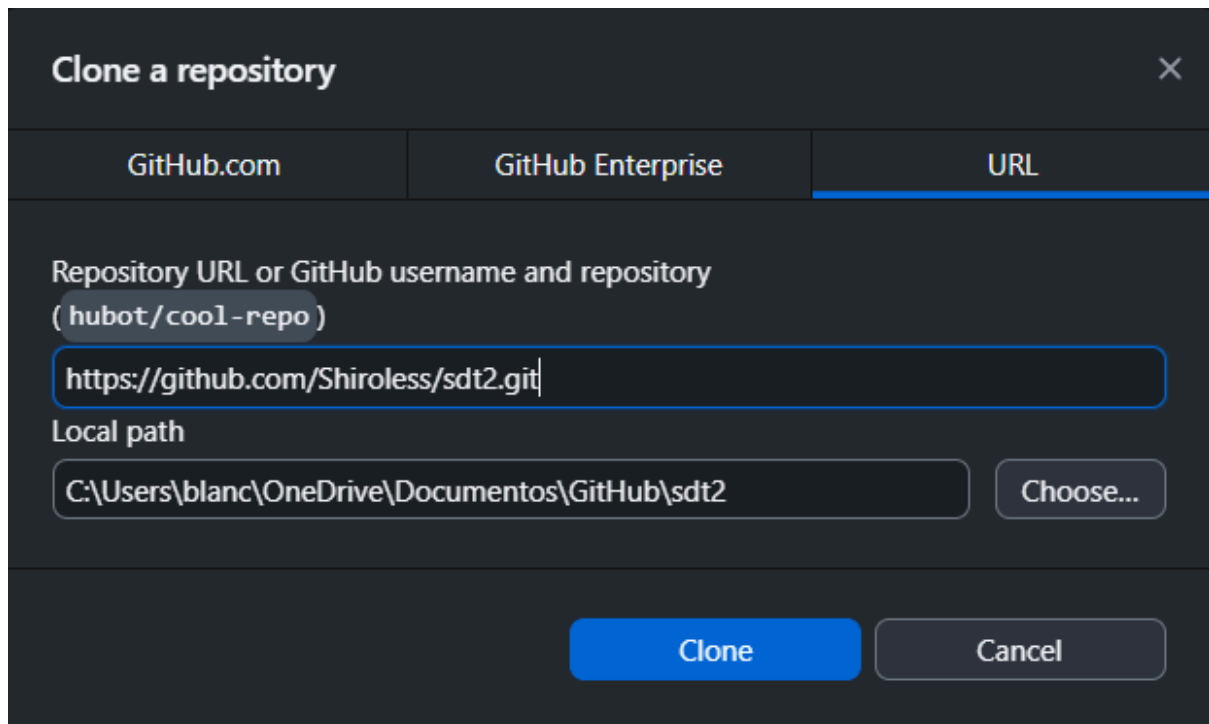
q. delete local project and local repo



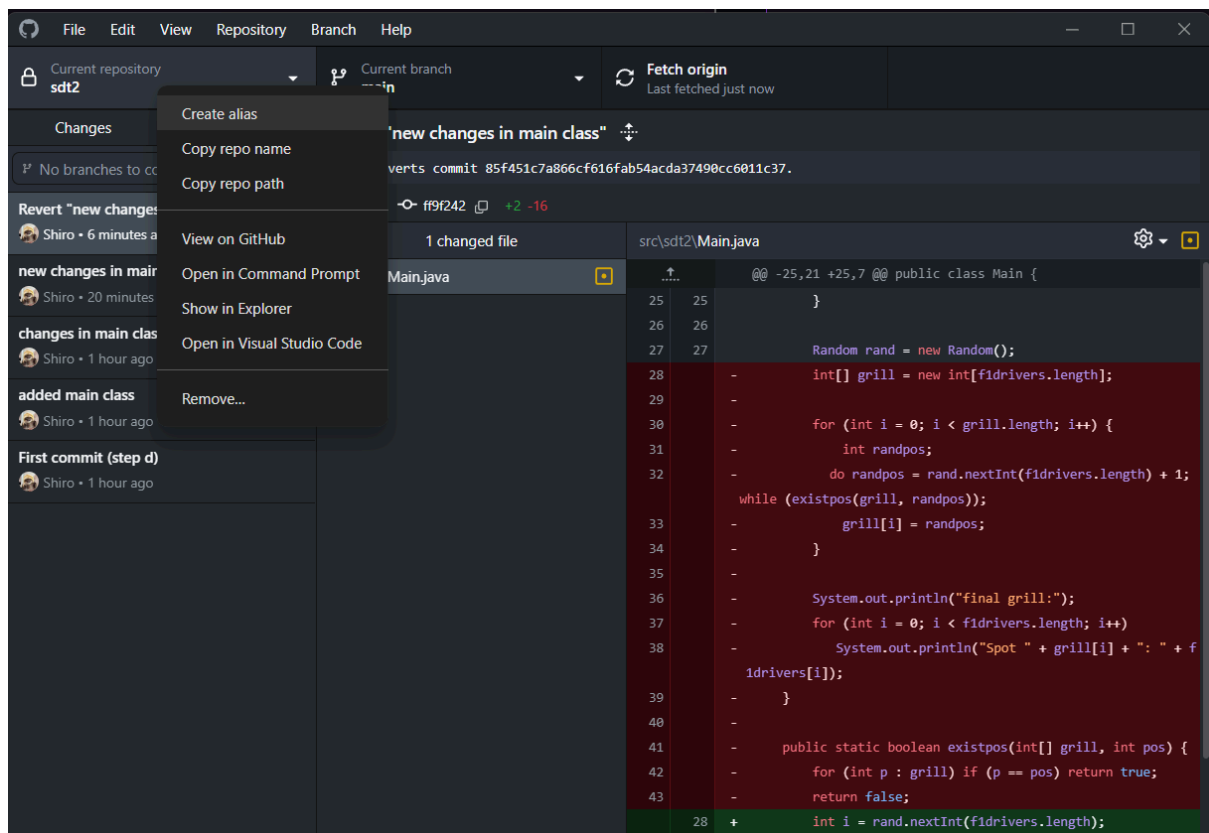


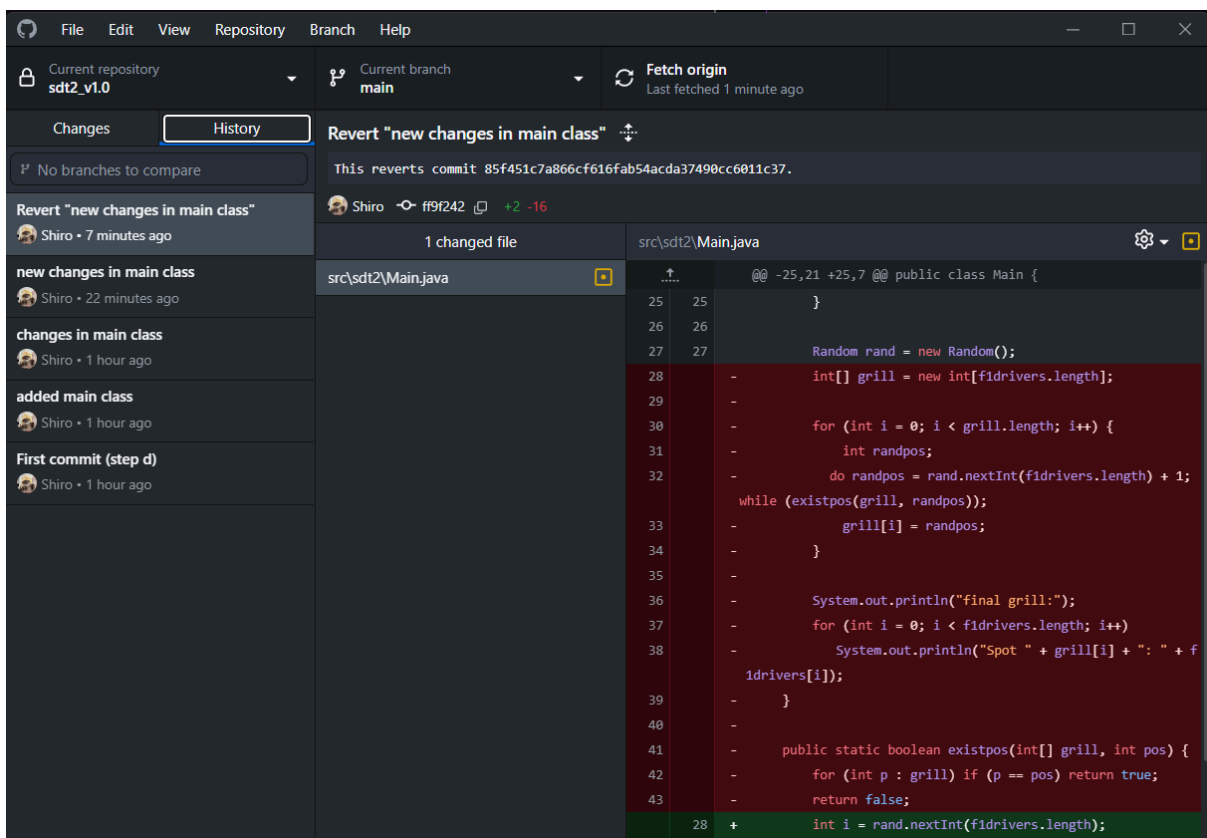
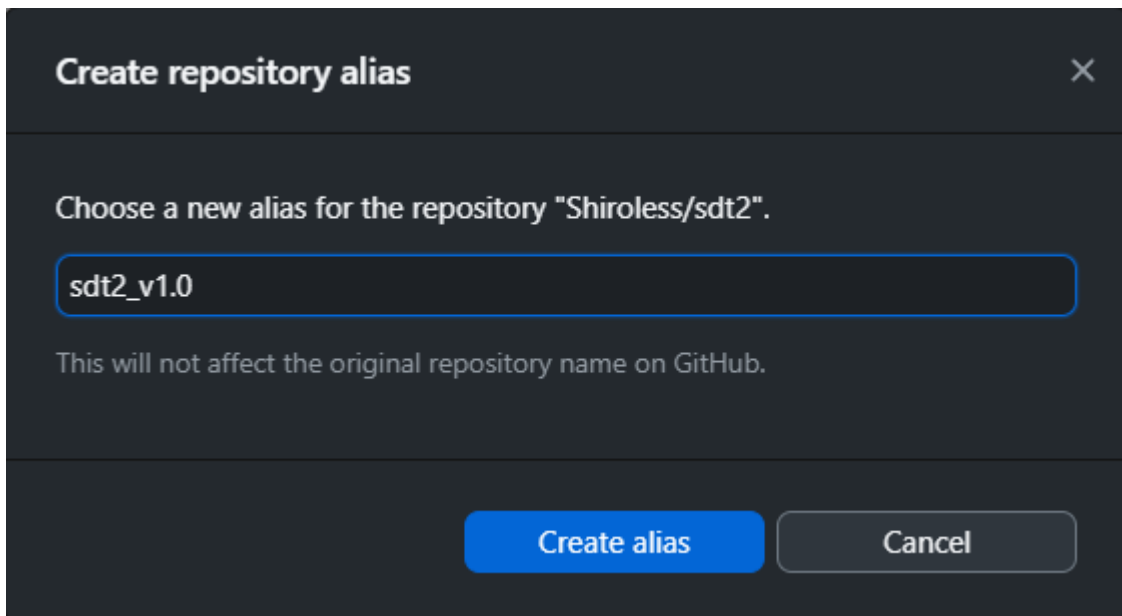
r. clone project from remote repo (git clone)



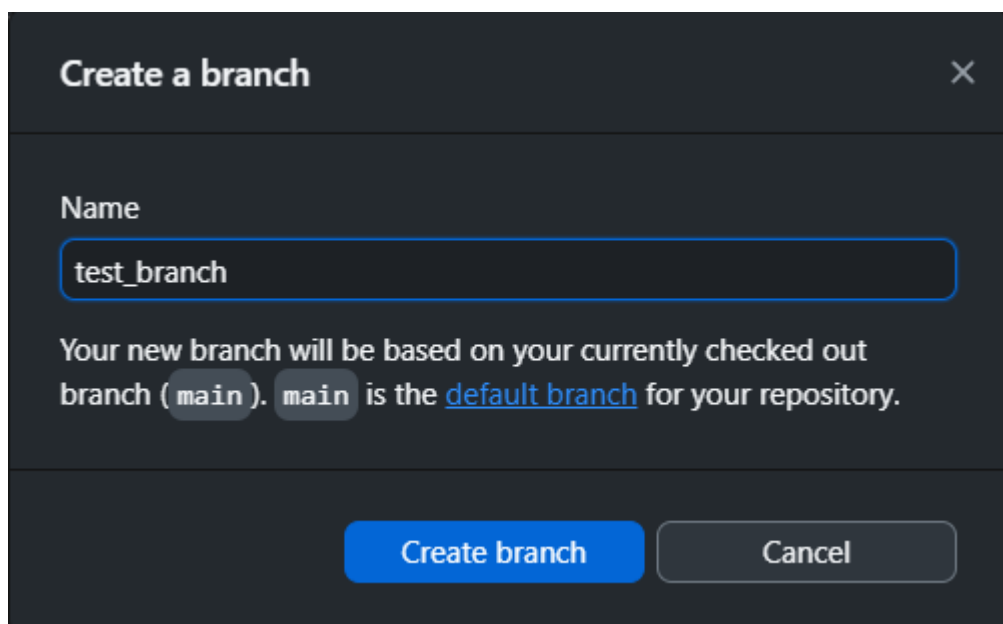
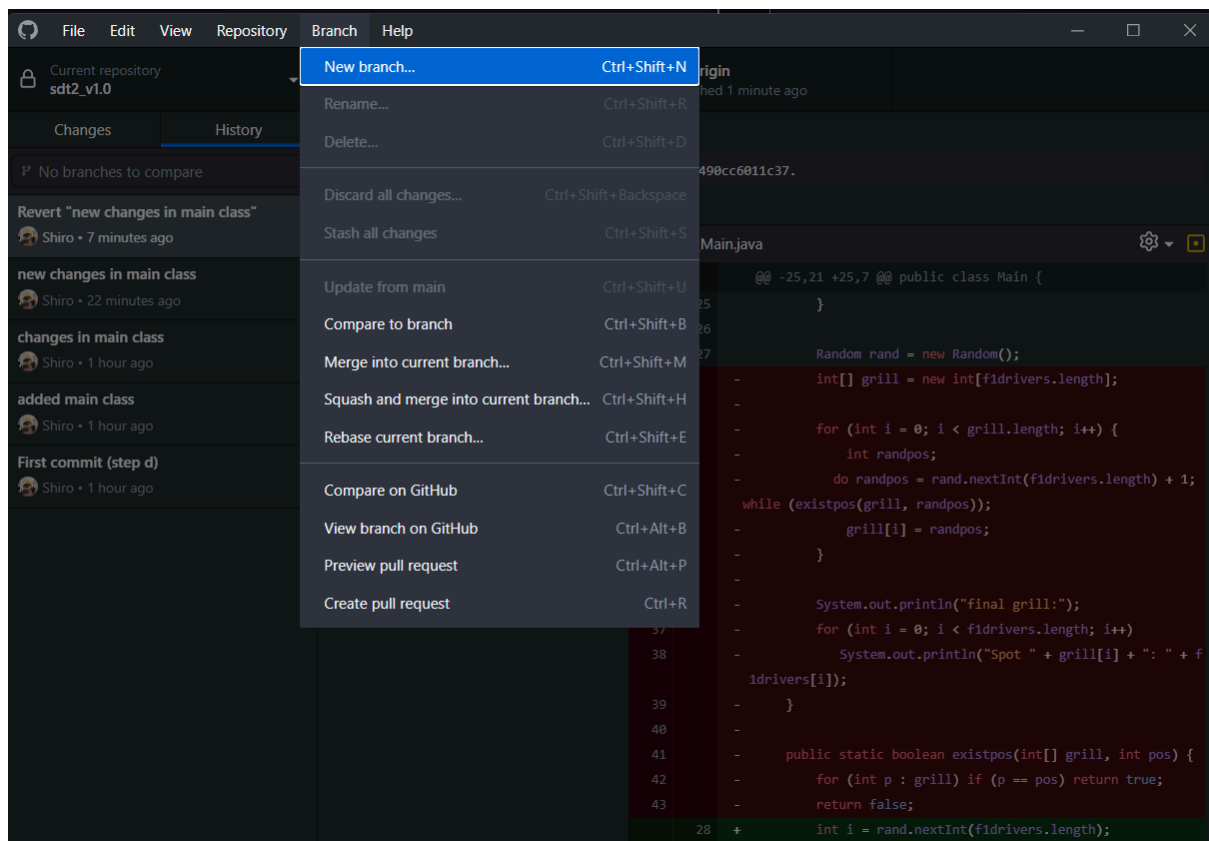


- s. create tag/release, try to switch between this tag and master branch (git branch, git tag)

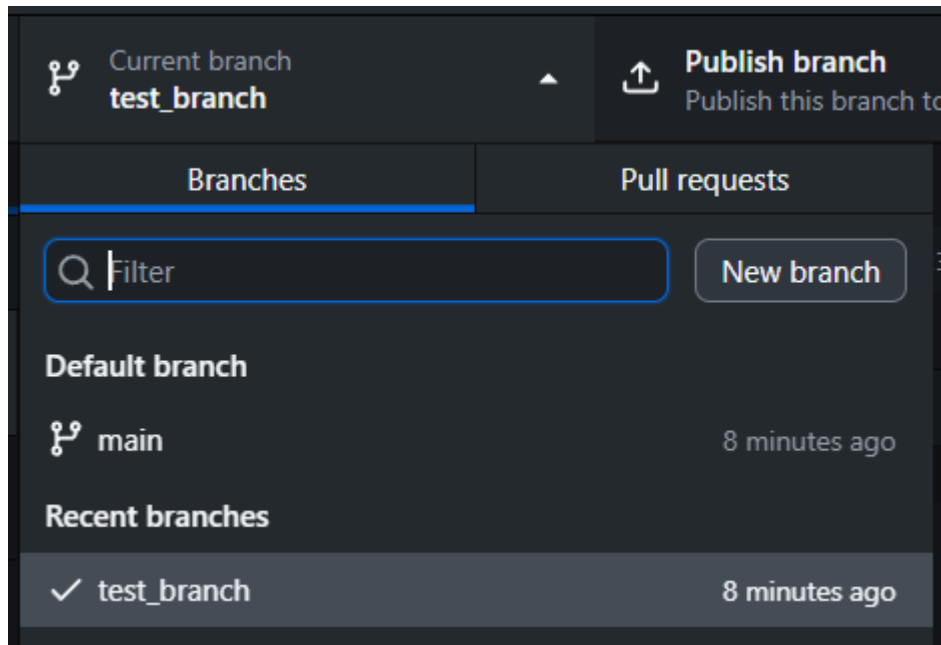




t. create new branch from the master one



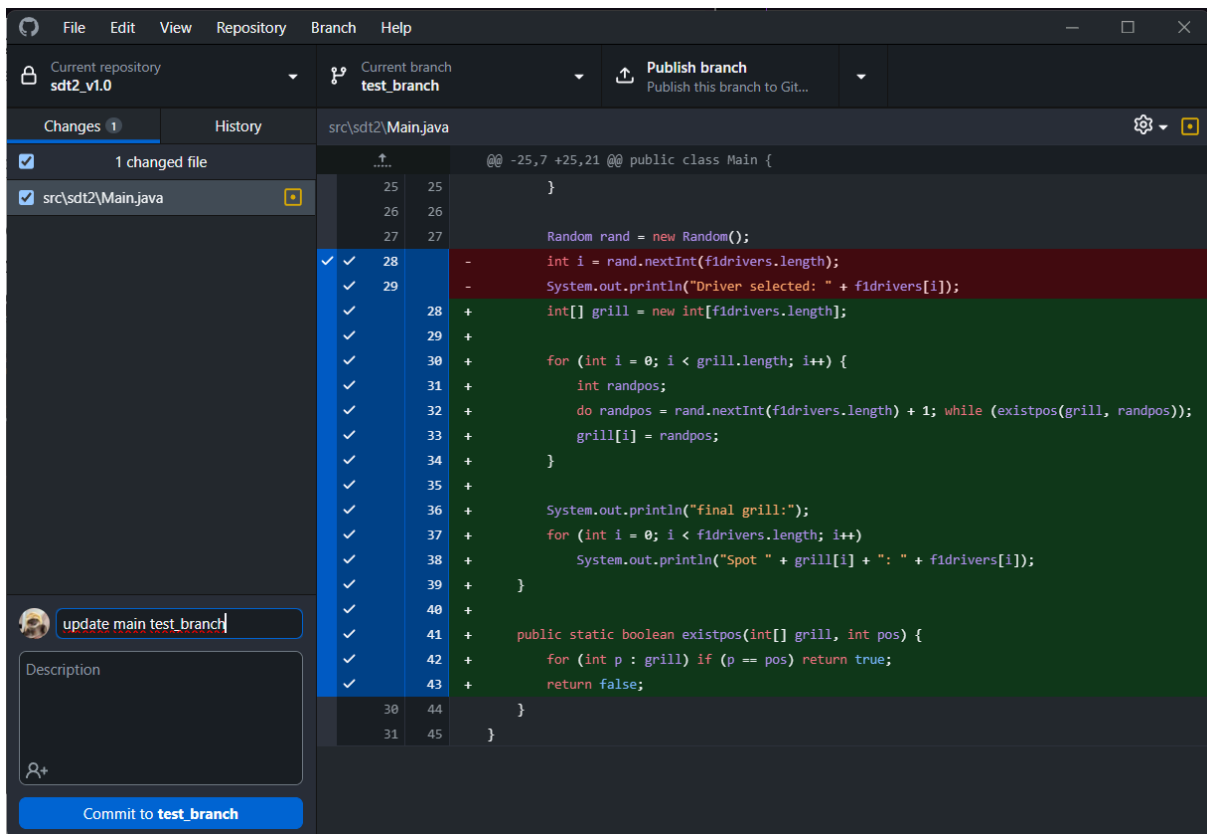
u. switch to branch (git merge)



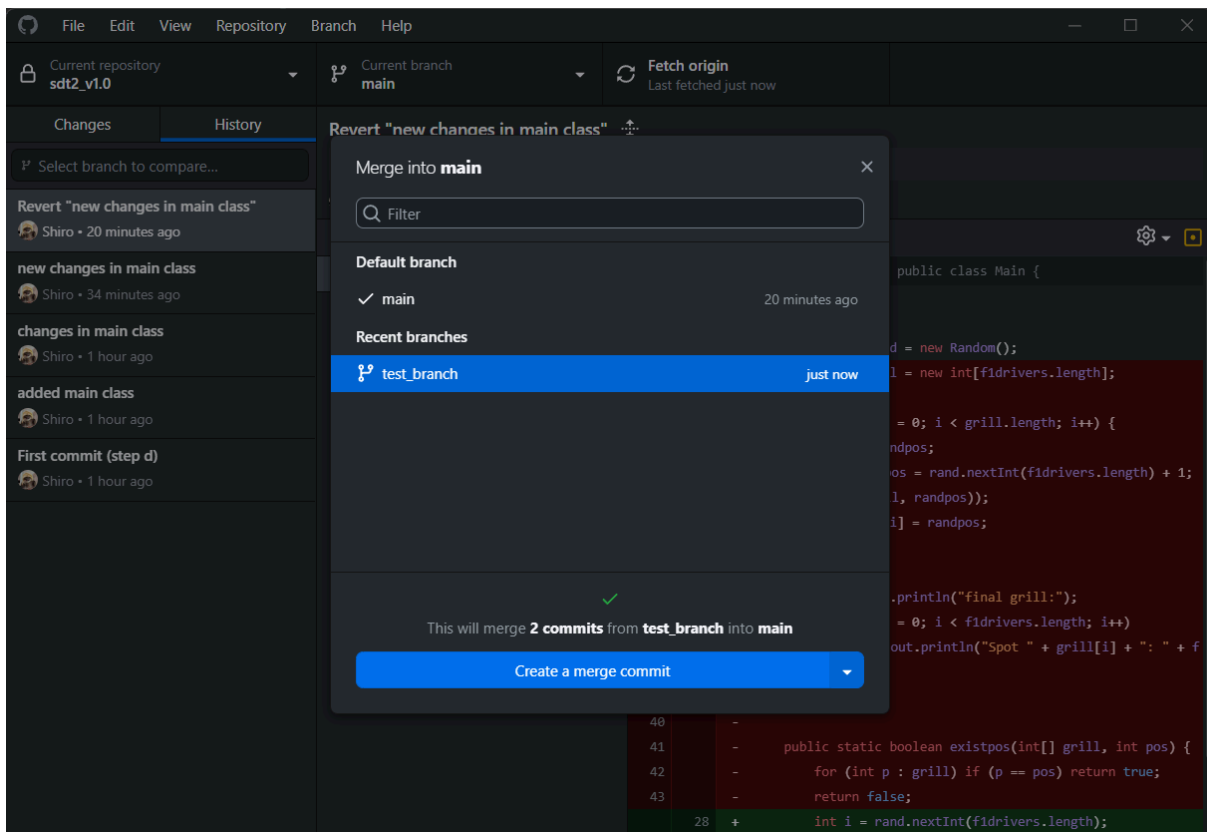
v. improve your code in a branch (e.g. change the sorting algorithm)

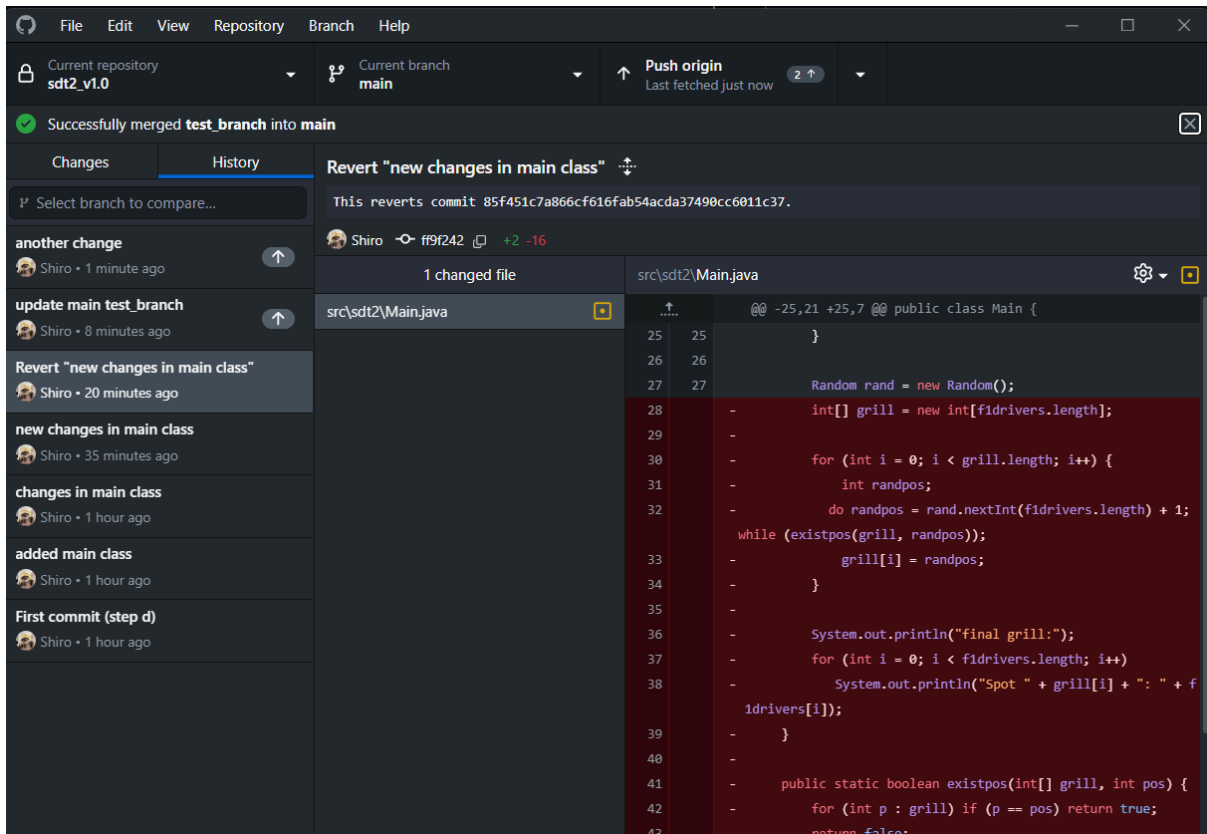
The screenshot shows the Eclipse IDE with a Java file named 'Main.java' open. The code is as follows:

```
1 import java.util.Arrays;
2 import java.util.Random;
3
4 public class Main {
5     public static void main(String[] args) {
6         String[] f1drivers = {
7             "Lewis Hamilton",
8             "Max Verstappen",
9             "Charles Leclerc",
10            "Sergio Pérez",
11            "Valtteri Bottas",
12            "Lando Norris",
13            "Daniel Ricciardo",
14            "Fernando Alonso",
15            "Sebastian Vettel",
16            "Carlos Sainz"
17        };
18
19        Arrays.sort(f1drivers);
20        System.out.println("List of drivers");
21        for (String driver : f1drivers) {
22            System.out.println(driver);
23        }
24
25        Random rand = new Random();
26        int[] grill = new int[f1drivers.length];
27
28        for (int i = 0; i < grill.length; i++) {
29            int randpos;
30            do randpos = rand.nextInt(f1drivers.length) + 1; while (existpos(grill, randpos));
31            grill[i] = randpos;
32        }
33
34        System.out.println("final grill:");
35        for (int i = 0; i < f1drivers.length; i++) {
36            System.out.println("Spot " + grill[i] + ": " + f1drivers[i]);
37        }
38    }
39
40    public static boolean existpos(int[] grill, int pos) {
41        for (int p : grill) if (p == pos) return true;
42        return false;
43    }
44 }
```

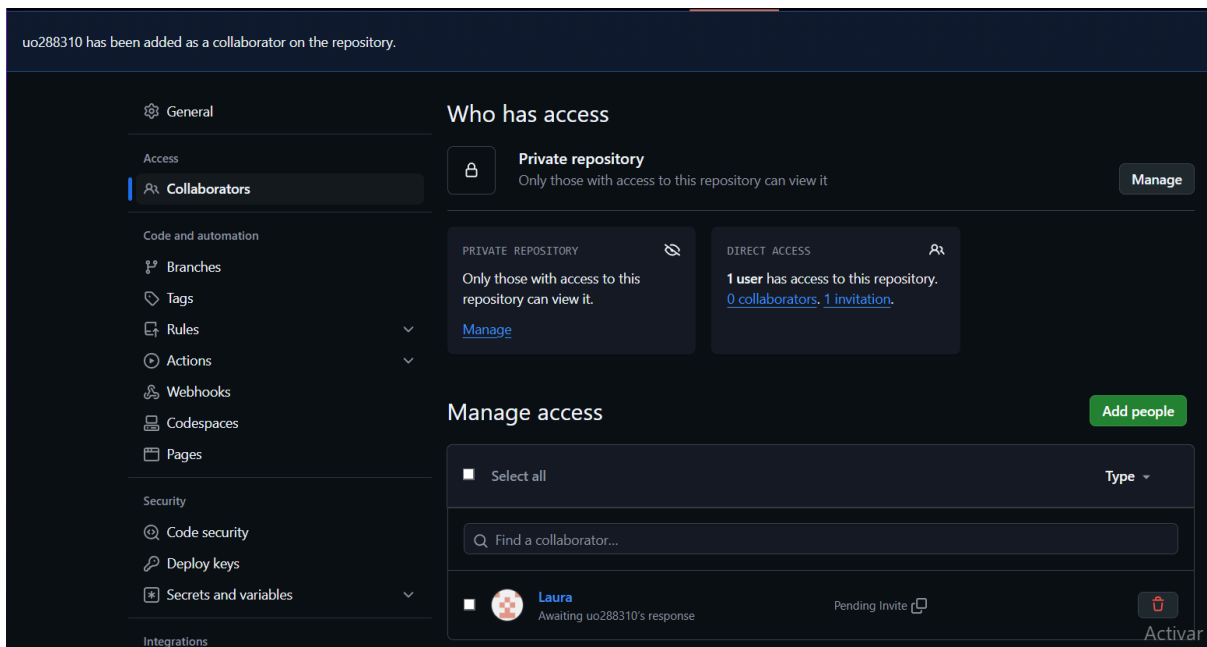


w. merge new branch in to the master branch





x. give a url to repo to one of your friends (before you have to allow him/her access to this repo)



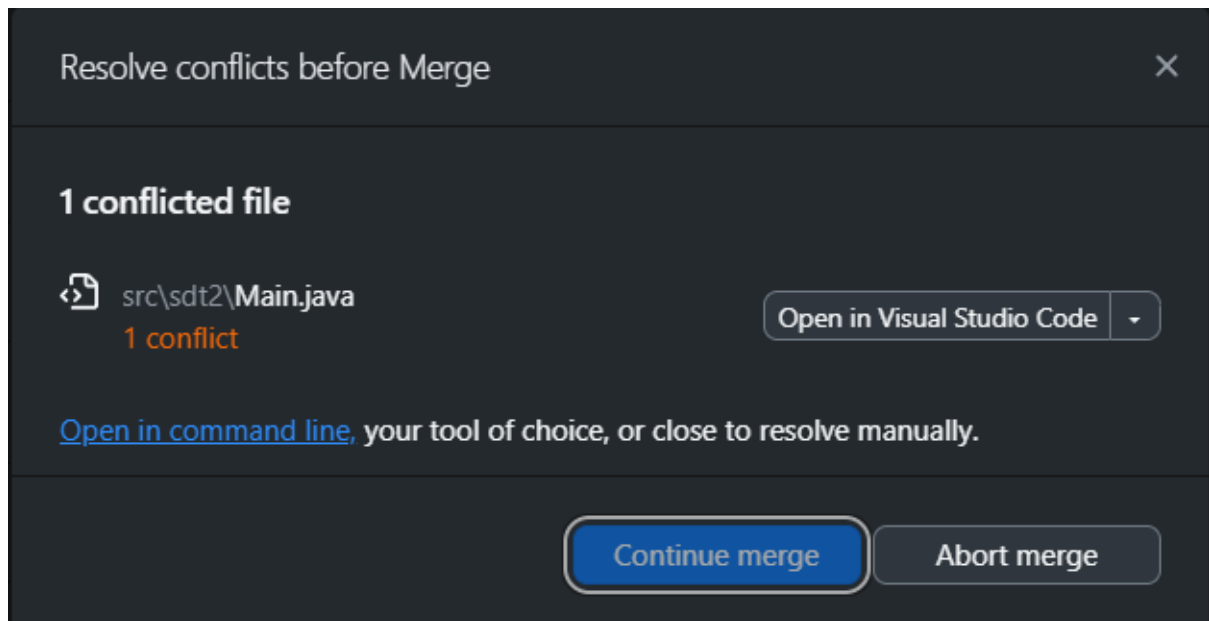
y. try to produce conflict

The screenshot shows the IntelliJ IDEA interface. At the top, the menu bar includes File, Edit, View, Repository, Branch, and Help. Below the menu bar, the 'Current repository' is set to 'sdt2_v1.0' and the 'Current branch' is 'main'. The 'Push origin' button is visible, indicating the last fetch was 6 minutes ago. The 'Changes' tab is active, showing a list of commits. The 'History' tab is also visible. The 'Update Main.java' commit is selected, showing a diff for 'src\sdt2\Main.java'. The diff shows a change in the 'Main' class, with line 17 being added. The diff view shows the following code:

```
@@ -14,7 +14,6 @@ public class Main {  
14 14     "Lando Norris",  
15 15     "Daniel Ricciardo",  
16 16     "Fernando Alonso",  
17 -    "Sebastian Vettel",  
18 17     "Carlos Sainz"  
19 18 };  
20 19
```

The screenshot shows a dialog box titled 'Newer commits on remote'. It contains a warning icon and the following text: 'Desktop is unable to push commits to this branch because there are commits on the remote that are not present on your local branch. Fetch these new commits before pushing in order to reconcile them with your local commits.' At the bottom of the dialog, there are two buttons: 'Fetch' and 'Cancel'.

The screenshot shows a button labeled 'Pull origin' with a downward arrow icon. Below the button, it says 'Last fetched jus...'. To the right of the button, there is a small status bar showing '1 ↑ 1 ↓'.




z. solve it and push the solution to remote repo

```
5 public class Main {  
7     public static void main(String[] args) {  
8         String[] f1drivers = {  
9             "Lewis Hamilton",  
9             "Max Verstappen",  
1            "Charles Leclerc",  
2            "Sergio Pérez",  
3            "Valtteri Bottas",  
4            "Lando Norris",  
5            "Daniel Ricciardo",  
6            "Fernando Alonso",  
7            "Sebastian Vettel",  
8            "Carlos Sainz"  
9        };  
9    }  
9
```



Resolve conflicts before Merge

✓ All conflicted files have been resolved.

0 conflicted files

 src\sdt2\Main.java

No conflicts remaining



[Open in command line](#), your tool of choice, or close to resolve manually.

Continue merge

Abort merge

File Edit View Repository Branch Help

Current repository
sdt2_v1.0

Current branch
main

Push origin
Last fetched 2 minu... 2 ↑

Successfully merged origin/main into main

Changes

History

Update Main.java

P Select branch to compare...

1 changed file

src\sdt2\Main.java

Shiro • 3 minutes ago

another change
Shiro • 23 hours ago

update main test_branch
Shiro • 23 hours ago

Revert "new changes in main class"
Shiro • 23 hours ago

new changes in main class
Shiro • yesterday

changes in main class
Shiro • yesterday

added main class
Shiro • yesterday

First commit (step d)
Shiro • yesterday

added main class
Shiro • yesterday

First commit (step d)
Shiro • yesterday

src\sdt2\Main.java

@@ -14,7 +14,6 @@ public class Main {
14 14 "Lando Norris",
15 15 "Daniel Ricciardo",
16 16 "Fernando Alonso",
17 - "Sebastian Vettel",
18 17 "Carlos Sainz"
19 18 };
20 19

FileEditViewRepositoryBranchHelp

Current repository
sdt2_v1.0

Current branch
main

Fetch origin
Last fetched just now

Successfully merged origin/main into main

ChangesHistory

Update Main.java
Shiro • 3 minutes ago

another change
Shiro • 23 hours ago

update main test_branch
Shiro • 23 hours ago

Revert "new changes in main class"
Shiro • 23 hours ago

new changes in main class
Shiro • yesterday

changes in main class
Shiro • yesterday

added main class
Shiro • yesterday

First commit (step d)
Shiro • yesterday

added main class
Shiro • yesterday

First commit (step d)
Shiro • yesterday

Update Main.java
Shiro 62e9d60 +0 -1

1 changed file
src\sdt2\Main.java

src\sdt2\Main.java

↑...

1414

1515

1616

17-

1817

1918

2019

↓

@@ -14,7 +14,6 @@ public class Main {

"Lando Norris",

"Daniel Ricciardo",

"Fernando Alonso",

"Sebastian Vettel",

"Carlos Sainz"

};