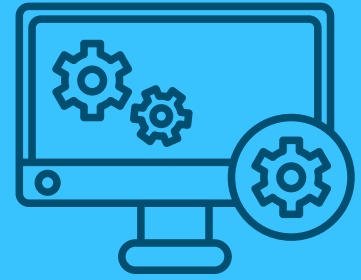


SECOND TASK

SOFTWARE DEVELOPMENT TOOLS



Name	Laura Fernández de Arquer
Task	GIT
Date	29/11/2024

FIRST STEPS

I created a Github remote repository with the name “SecondTask”.

SecondTask Public

Second Task for the Software Development Tools course

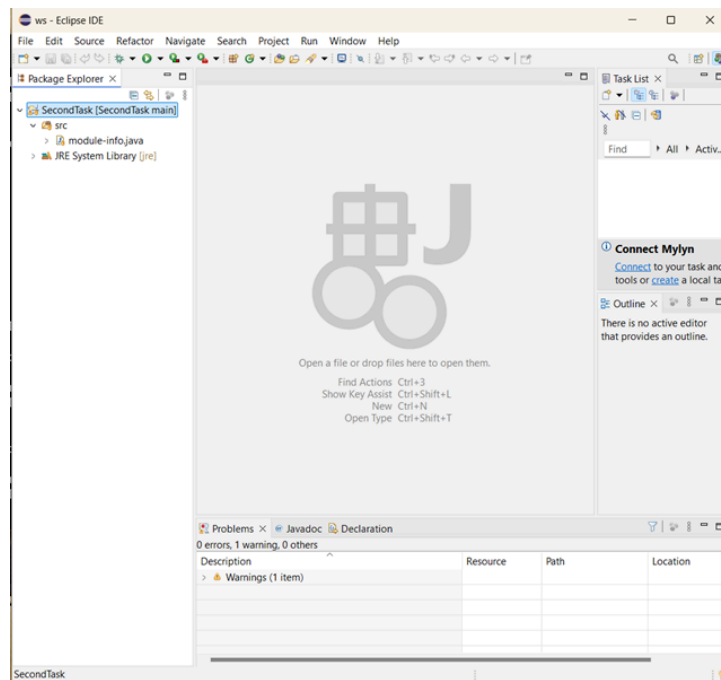
Java Updated 4 minutes ago

☆ Star ▾

I installed Git. With this command and the URL from the repository, I cloned the repository. I chose to work from the terminal because it's more difficult and less intuitive, so I can learn new things and take new challenges.

```
git clone https://github.com/uo288310/SecondTask.git
```

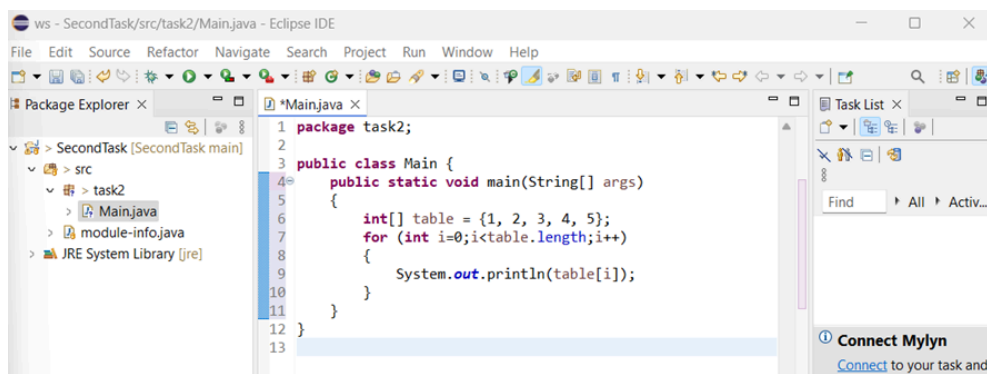
I also created the project on Eclipse.



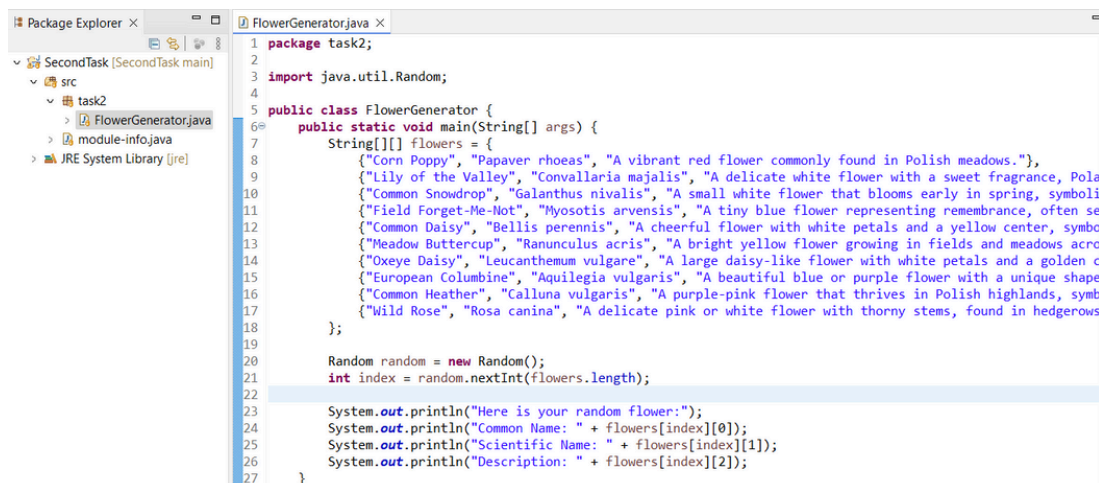
The first commit of the empty project.

```
git commit -m "First commit: empty project"
```

The first project I made was the suggested example, adding elements to a table and writing them. I committed it and made a push.



I started making changes and decided to implement a class with functionality, so I programmed a class that gives you information about random flowers.








I committed with an explanation text and made a push.

```
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:   src/task2/FlowerGenerator.java

PS C:\Users\unico\Documents\UNIVERSIDAD\BIALYSTOK\SDT\TASK2\SecondTask> git add .
PS C:\Users\unico\Documents\UNIVERSIDAD\BIALYSTOK\SDT\TASK2\SecondTask> git commit -m "I programmed a generator for random flowers data to have a functional application"
```

Wich we can see reflected on the GitHub repository to prove that it is working good.

 uo288310	I programmed a generator for random flowers data to have a functional...	66d964d · 16 minutes ago	🕒 3 Commits
 src	I programmed a generator for random flowers data to have ...	16 minutes ago	
 .classpath	First commit: empty project	7 hours ago	
 .gitignore	First commit: empty project	7 hours ago	
 .project	First commit: empty project	7 hours ago	

I made more changes, adding more flowers to the list.

```
PS C:\Users\unico\Documents\UNIVERSIDAD\BIALYSTOK\SDT\TASK2\SecondTask> git commit -m "I added more code (a new flower to the list)"
On branch main
Your branch is up to date with 'origin/main'.

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:   src/task2/FlowerGenerator.java

no changes added to commit (use "git add" and/or "git commit -a")
PS C:\Users\unico\Documents\UNIVERSIDAD\BIALYSTOK\SDT\TASK2\SecondTask> |
```

With git log, I look at the code history.

```
PS C:\Users\unico\Documents\UNIVERSIDAD\BIALYSTOK\SDT\TASK2\SecondTask> git log
commit 66d964d9debb3aff50cd83bcd8f0dbd47ccf6351 (HEAD -> main, origin/main)
Author: Laura <uo288310@uniovi.es>
Date: Thu Nov 28 19:21:17 2024 +0100

    I programmed a generator for random flowers data to have a functional application

commit 04cec3143b28aad37e12d6e42fc3bc7b29ce9564
Author: Laura <uo288310@uniovi.es>
Date: Thu Nov 28 18:56:07 2024 +0100

    prueba commit

commit 785c17ab96f3b3ef9448943fdbf342e639fc4cc5
Author: Laura <uo288310@uniovi.es>
Date: Thu Nov 28 12:39:15 2024 +0100

    First commit: empty project
PS C:\Users\unico\Documents\UNIVERSIDAD\BIALYSTOK\SDT\TASK2\SecondTask> |
```

And with git blame at the codes annotations.

```
PS C:\Users\unico\Documents\UNIVERSIDAD\BIALYSTOK\SDT\TASK2\SecondTask> git blame
```

When I did the git checkout, my branch was up to date.

```
PS C:\Users\unico\Documents\UNIVERSIDAD\BIALYSTOK\SDT\TASK2\SecondTask> git checkout
M       src/task2/FlowerGenerator.java
Your branch is up to date with 'origin/main'.
```

I added changes without commit.

```
Random random = new Random();  
int index = random.nextInt(flowers.length);  
//change added in the n) exercise  
System.out.println("Here is your random flower:"
```

When trying to do a revert of the last change, I got an Error because I didn't commit.

I do the push of the change correctly.

```
PS C:\Users\unico\Documents\UNIVERSIDAD\BIALYSTOK\SDT\TASK2\SecondTask> git add .  
PS C:\Users\unico\Documents\UNIVERSIDAD\BIALYSTOK\SDT\TASK2\SecondTask> git commit  
-m "Added a comment to the project"  
[main 8b41643] Added a comment to the project  
2 files changed, 1 insertion(+), 1 deletion(-)  
delete mode 100644 README.md  
PS C:\Users\unico\Documents\UNIVERSIDAD\BIALYSTOK\SDT\TASK2\SecondTask> git push  
Enumerating objects: 9, done.  
Counting objects: 100% (9/9), done.  
Delta compression using up to 12 threads  
Compressing objects: 100% (4/4), done.  
Writing objects: 100% (5/5), 482 bytes | 482.00 KiB/s, done.  
Total 5 (delta 2), reused 0 (delta 0), pack-reused 0 (from 0)  
remote: Resolving deltas: 100% (2/2), completed with 2 local objects.  
To https://github.com/uo288310/SecondTask.git  
1fab87..8b41643 main -> main  
PS C:\Users\unico\Documents\UNIVERSIDAD\BIALYSTOK\SDT\TASK2\SecondTask> |
```

I clone the from remote repo and make sure that it was created.

```
PS C:\Users\unico\Documents\UNIVERSIDAD\BIALYSTOK\SDT\TASK2\SecondTask> git clone  
https://github.com/uo288310/SecondTask.git  
Cloning into 'SecondTask'...  
remote: Enumerating objects: 38, done.  
remote: Counting objects: 100% (38/38), done.  
remote: Compressing objects: 100% (24/24), done.  
remote: Total 38 (delta 9), reused 29 (delta 6), pack-reused 0 (from 0)  
Receiving objects: 100% (38/38), 6.44 KiB | 2.15 MiB/s, done.  
Resolving deltas: 100% (9/9), done.
```

```
PS C:\Users\unico\Documents\UNIVERSIDAD\BIALYSTOK\SDT\TASK2\SecondTask\SecondTask>
```

Then I create tag/release and switch between branches with this commands.

```

PS C:\Users\unico\Documents\UNIVERSIDAD\BIALYSTOK\SDT\TASK2\SecondTask> git tag v1.0
PS C:\Users\unico\Documents\UNIVERSIDAD\BIALYSTOK\SDT\TASK2\SecondTask> git tag v1.0
PS C:\Users\unico\Documents\UNIVERSIDAD\BIALYSTOK\SDT\TASK2\SecondTask> git checkout v1.0
Note: switching to 'v1.0'.

You are in 'detached HEAD' state. You can look around, make experimental
changes and commit them, and you can discard any commits you make in this
state without impacting any branches by switching back to a branch.

If you want to create a new branch to retain commits you create, you may
do so (now or later) by using -c with the switch command. Example:

    git switch -c <new-branch-name>

Or undo this operation with:

    git switch -

Turn off this advice by setting config variable advice.detachedHead to false

HEAD is now at 8b41643 Added a comment to the project
PS C:\Users\unico\Documents\UNIVERSIDAD\BIALYSTOK\SDT\TASK2\SecondTask> git checkout main
Switched to branch 'main'
Your branch is up to date with 'origin/main'.
PS C:\Users\unico\Documents\UNIVERSIDAD\BIALYSTOK\SDT\TASK2\SecondTask> |

```

I create a branch and verify it was created.

```

PS C:\Users\unico\Documents\UNIVERSIDAD\BIALYSTOK\SDT\TASK2\SecondTask> git branch exerciseU
PS C:\Users\unico\Documents\UNIVERSIDAD\BIALYSTOK\SDT\TASK2\SecondTask> git branch exerciseU
* main

```

Switching to branch and the git merge.

```

PS C:\Users\unico\Documents\UNIVERSIDAD\BIALYSTOK\SDT\TASK2\SecondTask> git checkout exerciseU
Switched to branch 'exerciseU'
PS C:\Users\unico\Documents\UNIVERSIDAD\BIALYSTOK\SDT\TASK2\SecondTask> git checkout main
Switched to branch 'main'
Your branch is up to date with 'origin/main'.
PS C:\Users\unico\Documents\UNIVERSIDAD\BIALYSTOK\SDT\TASK2\SecondTask> git merge exerciseU
Already up to date.

```

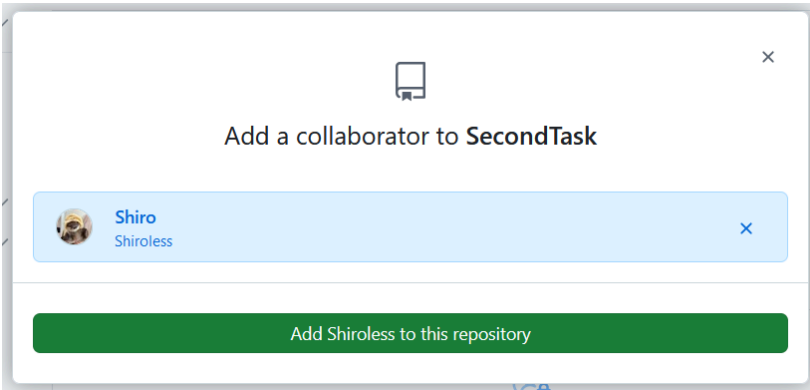
And then I merge the new branch with the main branch, that are the same, deleting the branch after it because it is not necessary anymore.

```

PS C:\Users\unico\Documents\UNIVERSIDAD\BIALYSTOK\SDT\TASK2\SecondTask> git merge exerciseU
Already up to date.
PS C:\Users\unico\Documents\UNIVERSIDAD\BIALYSTOK\SDT\TASK2\SecondTask> git branch -d exerciseU
Deleted branch exerciseU (was 8b41643).
PS C:\Users\unico\Documents\UNIVERSIDAD\BIALYSTOK\SDT\TASK2\SecondTask> |

```

Sharing the repository with friends.



Add a collaborator to **SecondTask**




Shiro Shiroless

Add Shiroless to this repository

Manage access Add people

☐ Select all Type ▾

Find a collaborator...

☐  **Shiro** Awaiting Shiroless's response Pending Invite  

Both modified the same line (I changed the name of a flower and she deleted it) and when I tried to push, a conflict appeared.

```
PS C:\Users\unico\Documents\UNIVERSIDAD\BIALYSTOK\SDT\TASK2\SecondTask> git push
To https://github.com/uo288310/SecondTask.git
! [rejected]        main -> main (fetch first)
error: failed to push some refs to 'https://github.com/uo288310/SecondTask.git'
hint: Updates were rejected because the remote contains work that you do not
hint: have locally. This is usually caused by another repository pushing to
hint: the same ref. If you want to integrate the remote changes, use
hint: 'git pull' before pushing again.
hint: See the 'Note about fast-forwards' in 'git push --help' for details.
```

The conflict trying to pull.

```
PS C:\Users\unico\Documents\UNIVERSIDAD\BIALYSTOK\SDT\TASK2\SecondTask> git pull
remote: Enumerating objects: 9, done.
remote: Counting objects: 100% (9/9), done.
remote: Compressing objects: 100% (4/4), done.
remote: Total 5 (delta 2), reused 0 (delta 0), pack-reused 0 (from 0)
Unpacking objects: 100% (5/5), 1.05 KiB | 82.00 KiB/s, done.
From https://github.com/uo288310/SecondTask
 66d964d..9cc0f82  main       -> origin/main
Updating 66d964d..9cc0f82
error: Your local changes to the following files would be overwritten by merge:
       src/task2/FlowerGenerator.java
Please commit your changes or stash them before you merge.
Aborting
```

Resolution of the conflict.

```
PS C:\Users\unico\Documents\UNIVERSIDAD\BIALYSTOK\SDT\TASK2\SecondTask> git status
On branch main
Your branch is ahead of 'origin/main' by 3 commits.
(use "git push" to publish your local commits)

nothing to commit, working tree clean
PS C:\Users\unico\Documents\UNIVERSIDAD\BIALYSTOK\SDT\TASK2\SecondTask> git commit -m "I modified"
On branch main
Your branch is ahead of 'origin/main' by 3 commits.
(use "git push" to publish your local commits)

nothing to commit, working tree clean
PS C:\Users\unico\Documents\UNIVERSIDAD\BIALYSTOK\SDT\TASK2\SecondTask> git push
Enumerating objects: 15, done.
Counting objects: 100% (15/15), done.
Delta compression using up to 12 threads
Compressing objects: 100% (6/6), done.
Writing objects: 100% (7/7), 957 bytes | 957.00 KiB/s, done.
Total 7 (delta 2), reused 0 (delta 0), pack-reused 0 (from 0)
remote: Resolving deltas: 100% (2/2), completed with 2 local objects.
To https://github.com/uo288310/SecondTask.git
 7ecbde6..97cbbb9  main -> main
PS C:\Users\unico\Documents\UNIVERSIDAD\BIALYSTOK\SDT\TASK2\SecondTask> |
```

Also, I worked in a friend's repository accepting the invitation she sent me.



[Shiroless](#) invited you to collaborate on
Shiroless/sdt2

Accept invitation

Decline invitation

And I created a conflict editing the same line as she (deleting the last F1 pilot) and committing the 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        };
```