

# Comment partager votre code... avec Git / GitHub

# OBJECTIFS

- Introduction à git
- Introduction à GitHub
- Créer votre propre dépôt et pousser en ligne
- Partagez votre dépôt avec le professeur et le(s) TA
- Utilisez des feature-branch et pull requests (PR) pour pousser les modifications

# INTRO AT GIT

- Git Handbook
  - <https://guides.github.com/introduction/git-handbook/>
- Git CheatSheet
  - <https://github.github.com/training-kit/downloads/github-git-cheat-sheet/>
- Git Branching
  - <https://learngitbranching.js.org/>
- Tutoriel GitHub
  - <https://lab.github.com/githubtraining/introduction-to-github>
- GitHub Backpack
  - <https://education.github.com/pack>

# VOTRE PROPRE RÉPO

- Assurez-vous que git est installé localement (devrait être disponible sur votre compte de laboratoire)
- Créer un nouveau dépôt appelé
  - **seg3503\_playground**
- Créer et commettre un README.md
  - <https://gist.github.com/jxson/1784669>

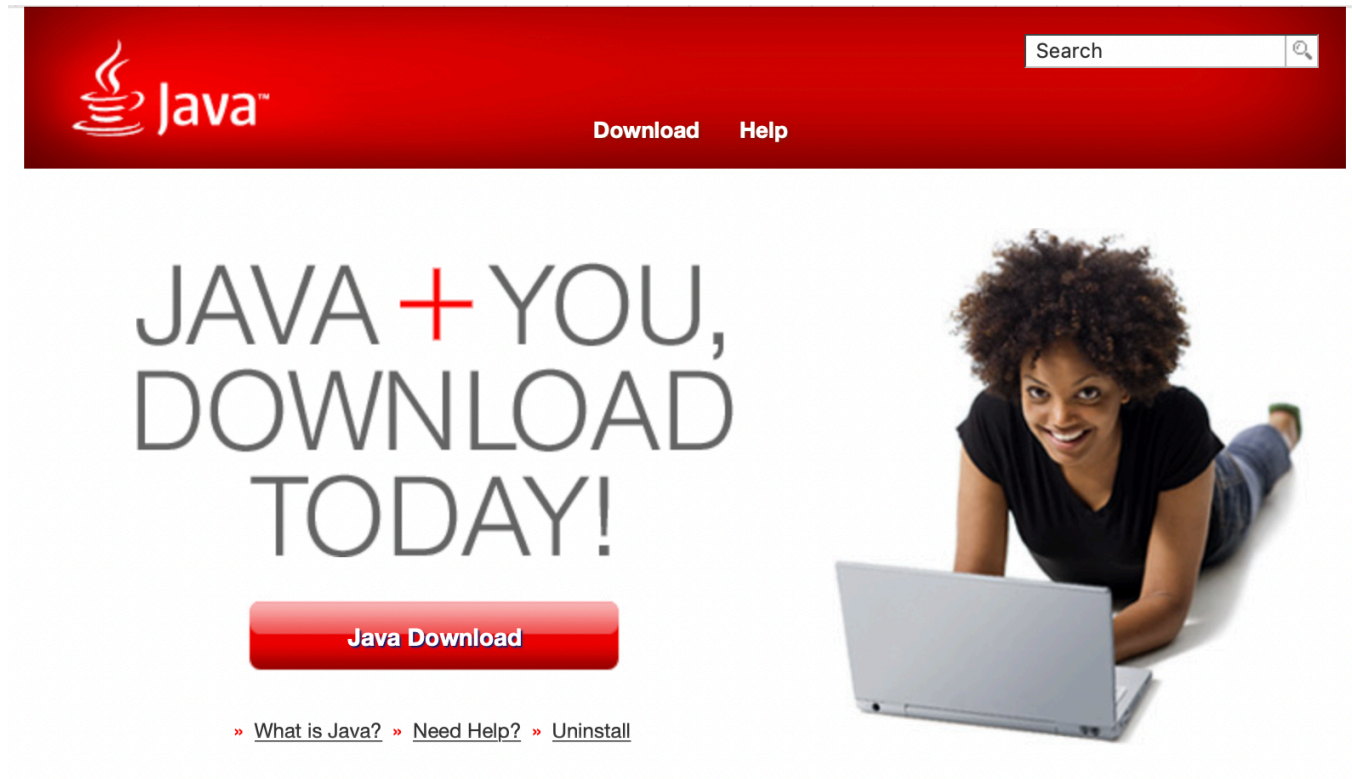
# GITHUB

- Créer un compte avec GitHub
  - <https://guides.github.com/activities/hello-world/>
- Poussez votre dépôt vers GitHub
  - **seg3503\_playground**
- Faites une mise à jour de votre fichier README.md
- Commettre et poussez vers GitHub

# AUTRES RESSOURCES / ARTICLES

- **My Git Workflow** (Article)
  - <https://blog.osteele.com/2008/05/my-git-workflow/>
- **git rebase -i HEAD~25** (Video)
  - <https://www.youtube.com/watch?v=V53cpDt2dr0>
- **GitHub Actions** (Article)
  - <https://www.bytesized.xyz/github-actions-tutorial>
- **How to undo (almost) anything with Git** (Article)
  - <https://github.blog/2015-06-08-how-to-undo-almost-anything-with-git/>

# ENV. JAVA



<https://java.com/>

```
08:14 /tmp/newmath_java $ ./bin/run  
Newmath (type 'exit' to exit program)  
Numerator: 10  
Demoninator: 5  
10 / 5 = 2  
Numerator: 20  
Demoninator: 3  
20 / 3 = 6  
Numerator: exit
```



# ENV JUNIT

[JUnit 4](#)

The 5th major version of the programmer-friendly testing framework for Java and the JVM

[User Guide](#)[Javadoc](#)[Code & Issues](#)[Q & A](#)[Support JUnit](#)

## Latest Release

[Jupiter v5.7.1](#)[Vintage v5.7.1](#)[Platform v1.7.1](#)

JUnit artifacts are deployed to Maven Central and can be downloaded using the above links. All files are signed using the keys listed in the [KEYS](#) file.

<https://junit.org/junit5/>

```
08:14 /tmp/newmath_java $ ./bin/test
```

Thanks for using JUnit! Support its development at <https://junit.org/sponsoring>

```
├─ JUnit Jupiter ✓
│   └─ NewmathTest ✓
│       ├── div_ok() ✓
│       └─ div_by_zero() ✓
└─ JUnit Vintage ✓
```

Test run finished after 31 ms

```
[ 3 containers found ]
[ 0 containers skipped ]
[ 3 containers started ]
[ 0 containers aborted ]
[ 3 containers successful ]
[ 0 containers failed ]
[ 2 tests found ]
[ 0 tests skipped ]
[ 2 tests started ]
[ 0 tests aborted ]
[ 2 tests successful ]
[ 0 tests failed ]
```

# ENV ELIXIR (+ EXUNIT)



# elixir

[HOME](#) [INSTALL](#) [LEARNING](#) [CASES](#) [DEVELOPMENT](#) [GUIDES](#) [DOCS](#) [BLOG](#)

Elixir is a dynamic, functional language for building scalable and maintainable applications.

Elixir leverages the Erlang VM, known for running low-latency, distributed, and fault-tolerant systems. Elixir is successfully used in web development, embedded software, data ingestion, and multimedia processing, across a wide range of industries. Here is a peek:

```
iex> "Elixir" |> String.graphemes() |> Enum.frequencies()
%{"E" => 1, "i" => 2, "l" => 1, "r" => 1, "x" => 1}
```

Check our [getting started guide](#) and our [learning page](#) to begin your journey with Elixir. Or keep scrolling for an overview of the platform, language, and tools.

News: [Elixir v1.11 released](#)

## OFFICIAL CHANNELS

- [Source code & Issues tracker](#)
- [#elixir-lang on freenode IRC](#)
- [@elixirlang on Twitter](#)



Watch the Elixir  
mini-documentary!

```
08:36 /tmp/newmath_ex $ ./bin/run
Erlang/OTP 23 [erts-11.1.7] [source] [64-bit] [smp:8]

Interactive Elixir (1.11.4) – press Ctrl+C to exit (Type h for help)
iex(1)> NewmathEx.div(5,2)
{:ok, 2.5}
iex(2)> NewmathEx.div(5,0)
{:error, "Cannot divide by zero"}
iex(3)> █
```

```
08:37 /tmp/newmath_ex $ ./bin/test
```

```
...
```

```
Finished in 0.03 seconds
```

```
1 doctest, 2 tests, 0 failures
```

```
Randomized with seed 617712
```

```
08:37 /tmp/newmath_ex $
```

# SOUSSION

- Git + GitHub Répo
- Partagez votre dépôt avec le professeur et le(s) TA
- Code de Java + Junit
- Code Elixir
- README.md
  - Instructions pour executer votre code
  - Screenshots pour *prover* que tu peux executer le code
    - Java, Junit,
    - Elixir, ExUnit