



EJERCICIO PRÁCTICO DE JENKINS Actividad 1

Tomando como base el repositorio

<https://github.com/vero0311/calculator>

1. Crear un job que haga lo siguiente:
 - 1.1. Descargue el proyecto de la rama master
 - 1.2. Compile el proyecto
 - 1.3. Genere el archivo .jar del proyecto

Pasos necesarios para crear el Job

1. Subir el servidor de Jenkins

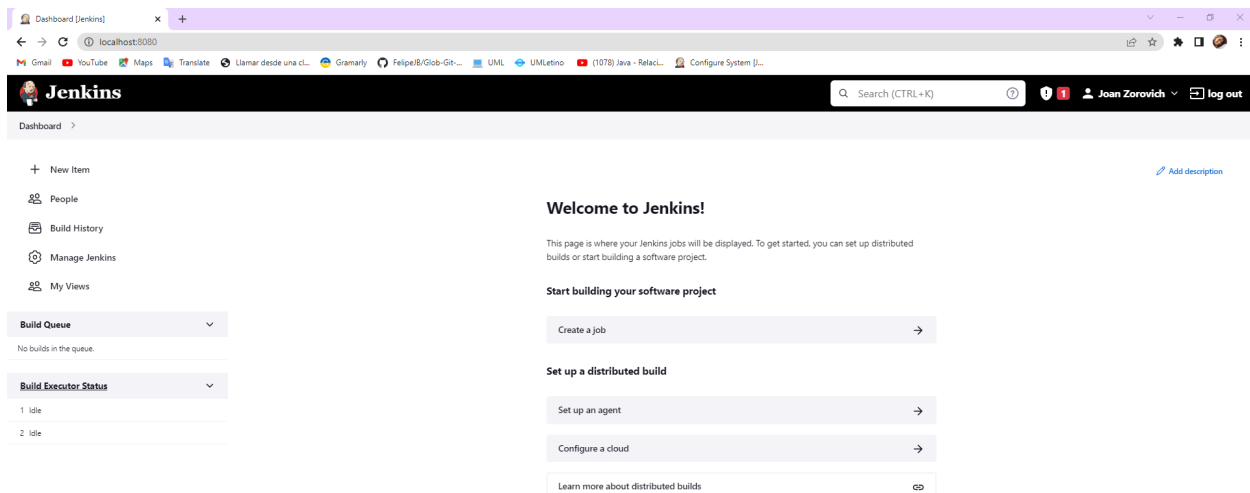
```
C:\Users\joan.zorovich\Downloads> java -jar jenkins.war start
```

```
Windows PowerShell (x86)
-a---- 10/6/2022 1:03 PM 86029032 VSCodeUserSetup-x64-1.72.0.exe

PS C:\Users\joan.zorovich\Downloads> java -jar jenkins.war start
Running from: C:\Users\joan.zorovich\Downloads\jenkins.war
webroot: $user.home/.jenkins
2022-11-02 01:42:20.940+0000 [id=1] INFO winstone.Logger#logInternal: Beginning extraction from war file
2022-11-02 01:42:20.979+0000 [id=1] WARNING o.e.j.s.handler.ContextHandler#setContextPath: Empty contextPath
2022-11-02 01:42:21.027+0000 [id=1] INFO org.eclipse.jetty.server.Server#doStart: jetty-10.0.11; built: 2022-06-2
1T21:12:44.640Z; git: d988aa016e0bb2de6fba84c1659049c72eae3e32; jvm 11.0.17+10-LTS-269
2022-11-02 01:42:21.666+0000 [id=1] INFO o.e.j.w.StandardDescriptorProcessor#visitServlet: NO JSP Support for /,
did not find org.eclipse.jetty.jsp.JettyJspServlet
2022-11-02 01:42:21.713+0000 [id=1] INFO o.e.j.s.s.DefaultSessionIdManager#doStart: Session workerName=node0
2022-11-02 01:42:22.093+0000 [id=1] INFO hudson.WebAppMain#contextInitialized: Jenkins home directory: C:\Users\j
oan.zorovich\.jenkins found at: $user.home/.jenkins
2022-11-02 01:42:22.219+0000 [id=1] INFO o.e.j.s.handler.ContextHandler#doStart: Started w.@6ad5923a{Jenkins v2.3
61.2,/,file:///C:/Users/joan.zorovich/.jenkins/war/,AVAILABLE}{C:\Users\joan.zorovich\.jenkins\war}
2022-11-02 01:42:22.236+0000 [id=1] INFO o.e.j.server.AbstractConnector#doStart: Started ServerConnector@38102d01
{HTTP/1.1, (http/1.1)}{0.0.0.0:8080}
2022-11-02 01:42:22.252+0000 [id=1] INFO org.eclipse.jetty.server.Server#doStart: Started Server@69fb6037{STARTIN
G}[10.0.11,sto=0] @1899ms
2022-11-02 01:42:22.252+0000 [id=26] INFO winstone.Logger#logInternal: Winstone Servlet Engine running: controlPor
t=disabled
2022-11-02 01:42:22.455+0000 [id=33] INFO jenkins.InitReactorRunner$1#onAttained: Started initialization
2022-11-02 01:42:22.641+0000 [id=32] INFO jenkins.InitReactorRunner$1#onAttained: Listed all plugins
```

2. ingresar al <http://localhost:8080/>

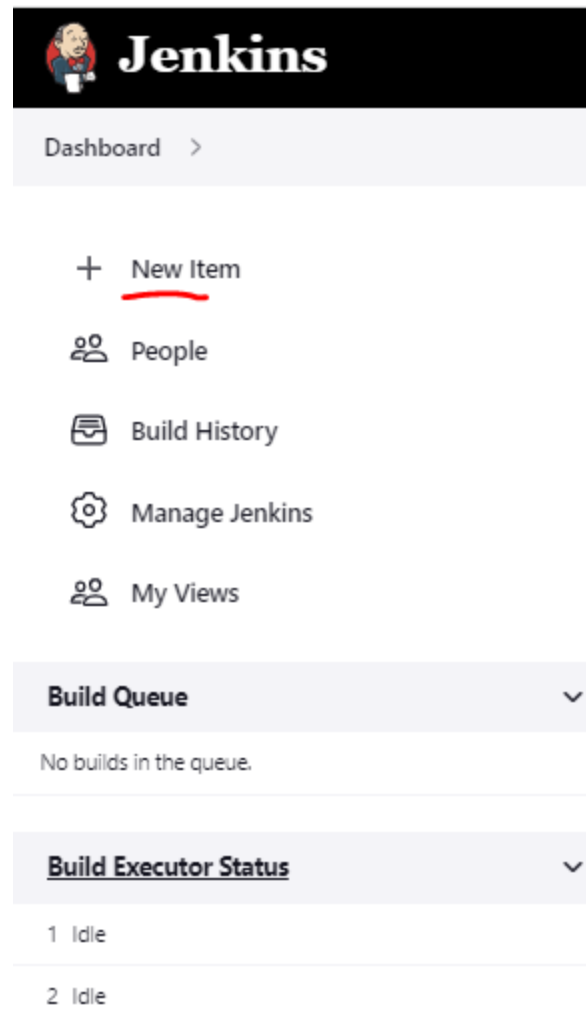
3. Hacer Log in



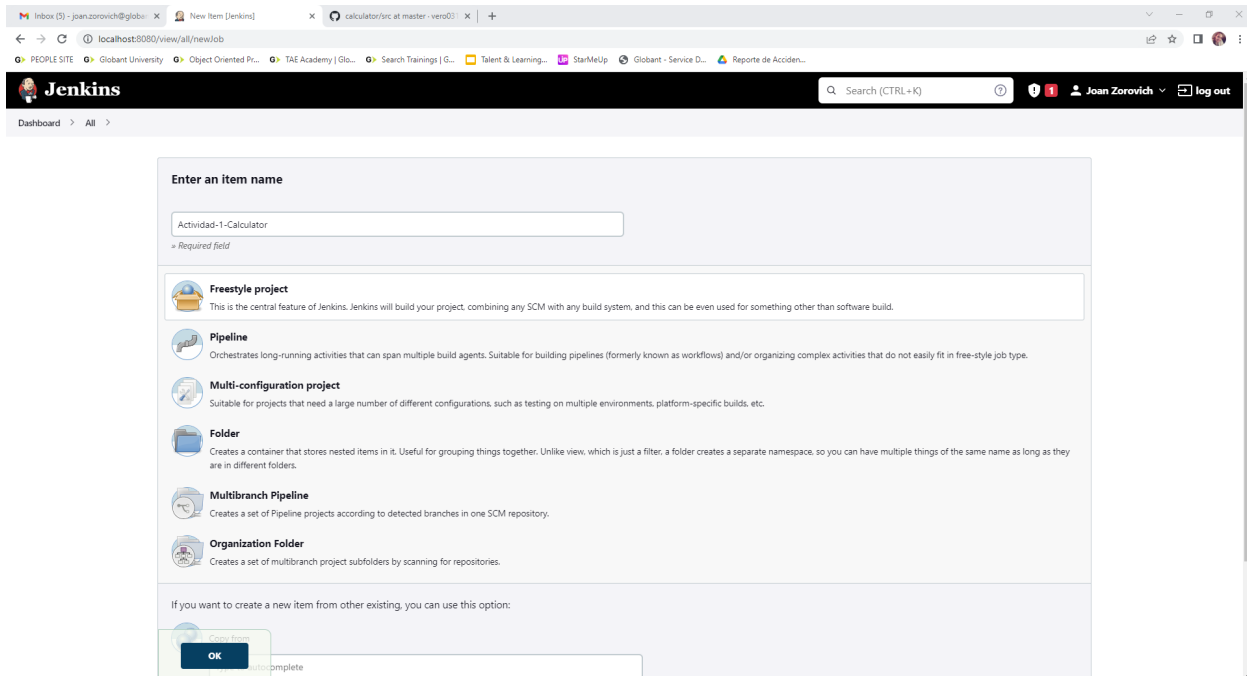
- Anteriormente se configuró Github en las herramientas globales de Jenkins

4. Crear el Job

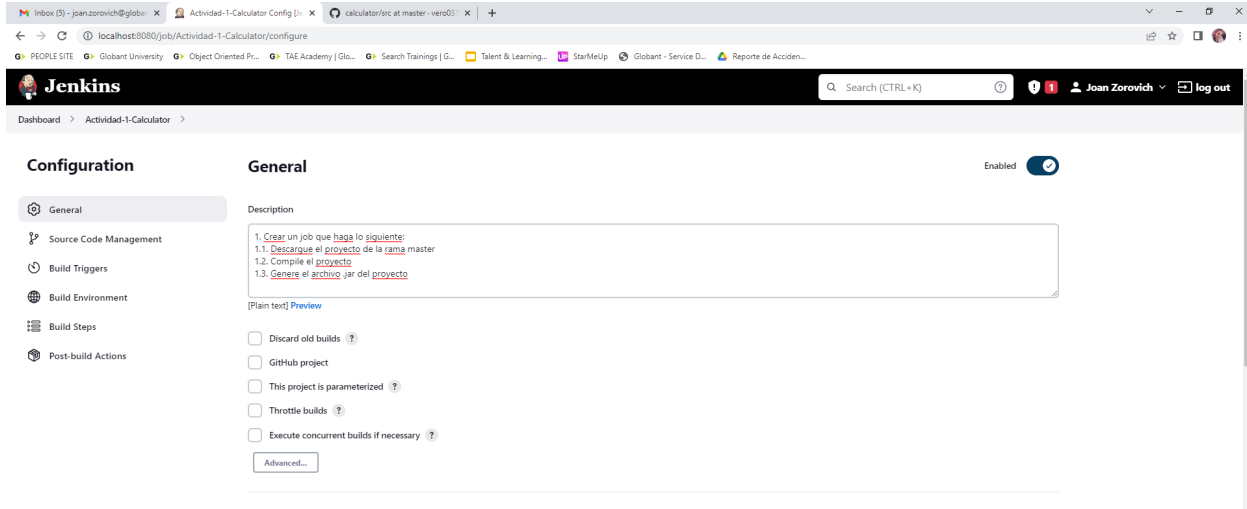
- En el Dashboard, dar clic en New Item



- Dar un nombre al Job
- En este caso, ya que no tenemos un proyecto plantilla, seleccionamos Freestyle project
- Damos click en ok



- En la descripción → para el caso academico, se ingresan todos los pasos que se van a realizar en el Job



- Como se va a trabajar con un repositorio de Github;
 - Seleccionar GIT
 - Colocar la URL del repositorio

Dashboard > Actividad-1-Calculator >

Configuration Advanced...

- General
- Source Code Management
- Build Triggers
- Build Environment
- Build Steps
- Post-build Actions

Source Code Management

☐ None

☒ **Git** ?

Repositories ?

Repository URL ?

Credentials ?

+ Add

- Indicar la rama donde queremos que se ejecute el proceso, en este caso master

Branches to build ?

Branch Specifier (blank for 'any') ?

Add Branch

github.com/vero0311/calculator

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vero0311/calculator Public

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master 1 branch 0 tags

Go to file Code

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0 stars

1 watching

0 forks

Releases

No releases published

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No packages published

Languages

Java 100.0%

veronica.restrepo Calculator project b2ec496 2 days ago 1 commit

src	Calculator project	2 days ago
.gitignore	Calculator project	2 days ago
README.md	Calculator project	2 days ago
calculator-jenkins_academy.iml	Calculator project	2 days ago
calculator.iml	Calculator project	2 days ago

README.md

calculator

- Indicar los pasos que quiero que el Job realice
 - Seleccionar la consola o el "lugar" desde donde se van a ejecutar los pasos - En este caso es desde la consola de Windows

Configuration

General

Source Code Management

Build Triggers

Build Environment

Build Steps

Post-build Actions

☐ GitHub hook trigger for GITScm polling ?

☐ Poll SCM ?

Build Environment

☐ Delete workspace before build starts

☐ Use secret text(s) or file(s) ?

☐ Add timestamps to the Console Output

☐ Inspect build log for published build scans

☐ Terminate a build if it's stuck

☐ With Ant ?

Build Steps

Add build step ^

Filter

Execute Windows batch command

Execute shell

Invoke Ant

Invoke Gradle script

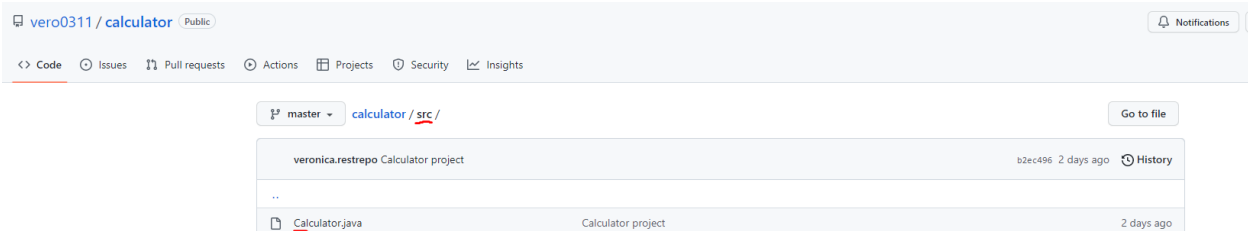
Invoke top-level Maven targets

Run with timeout

Set build status to "pending" on GitHub commit

- Ingresar los pasos
 - Importante! → no se tienen que ingresar pasos relacionados con clonar el repositorio, porque eso ya los realiza Jenkins
- a. Ingresar a la carpeta donde se encuentra el archivo .java

```
cd src
```



- b. Indicar los archivos .java que queremos que pasen a java class

```
javac Calculator.java
```

c. Crear una archivo manifest → necesario para crear la build, en ese archivo se especifica la clase principal en la que va a correr el programa.

```
fsutil file createnew Manifest.txt 0
```

d. Poner en la primera linea del Manifest Main-class: Calculator → indicando que esta es la clase principal

```
echo Main-class: Calculator> Manifest.txt
```

e. Crear el jar

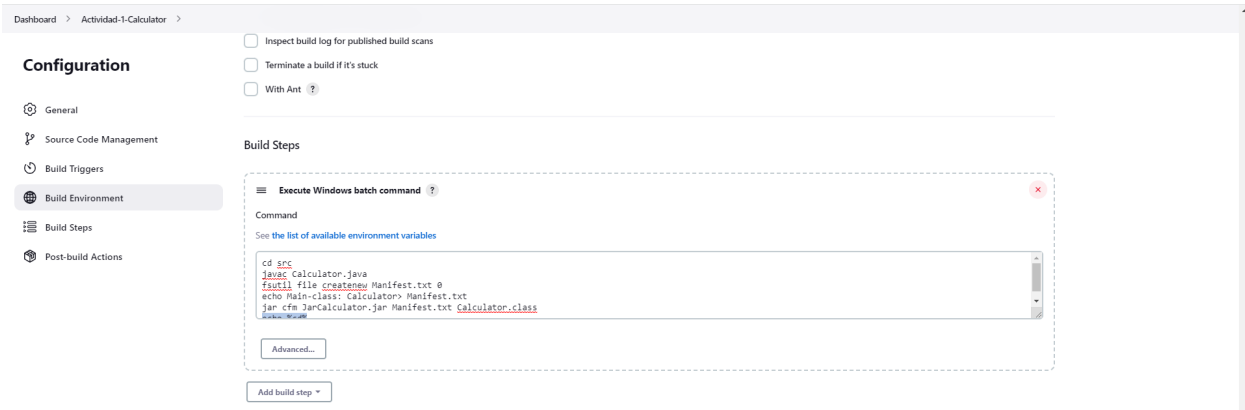
```
jar cfm JarCalculator.jar Manifest.txt Calculator.class
```

Explicacion del comando cfm

- c → se esta creando un nuevo archivo jar
- f → especifica el jar como un argumento, donde vamos a poder establecer el nombre que deseamos que tenga mi jar, en este caso JarCalculator
- m → significa que se le va a pasar el archivo manifest

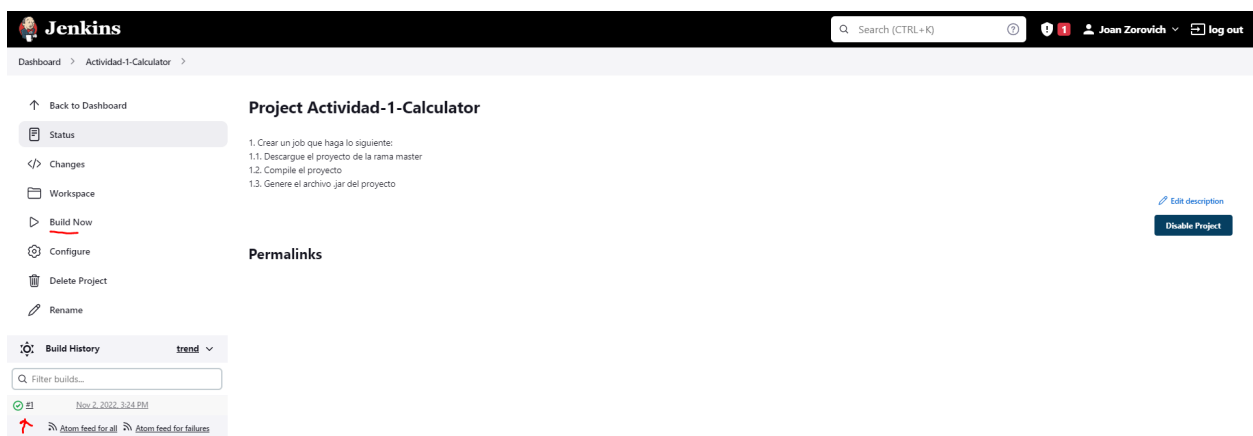
6. En este caso también se incorporó un comando para que muestre la ruta de la carpeta donde se genero la build

```
echo %cd%
```





Por último se da Apply y Save


5. Ejecutar el Job → Build Now




6. Validar si se ejecuto bien el Job, dar click en el #1, en este caso


 Rename


 **Build History** **trend** 

 **#1**


[Nov 2, 2022, 3:24 PM](#)



 [Atom feed for all](#)


 [Atom feed for failures](#)


Dashboard > Actividad-1-Calculator > #1


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 **Status**

 **Changes**

 **Console Output**


 **Edit Build Information**


 **Delete build '#1'**

 **Git Build Data**

 **Build #1 (Nov 2, 2022, 3:24:48 PM)**

 No changes.

 Started by user [Joan Zorovich](#)

 **Revision:** b2ec49664e0aa02b087274ba23f09bd99629c530
Repository: <https://github.com/vero0311/calculator>

- refs/remotes/origin/master

7. Consultar los logs



Jenkins

Dashboard > Actividad-1-Calculator > #1

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[☰ Status](#)

[</> Changes](#)

[>- Console Output](#)

[☑ Edit Build Information](#)

[🗑 Delete build '#1'](#)

[🔗 Git Build Data](#)

 **Build #**

 No char

 Started |

 **Revision**
Reposit

• 14



Console Output

```
Started by user Joan Zorovich
Running as SYSTEM
Building in workspace C:\Users\joan.zorovich\.jenkins\workspace\Actividad-1-Calculator
The recommended git tool is: NONE
No credentials specified
Cloning the remote Git repository
Cloning repository https://github.com/vero0311/calculator
> git init C:\Users\joan.zorovich\.jenkins\workspace\Actividad-1-Calculator # timeout=10
Fetching upstream changes from https://github.com/vero0311/calculator
> git --version # timeout=10
> git --version # 'git version 2.38.0.windows.1'
> git fetch --tags --force --progress -- https://github.com/vero0311/calculator +refs/heads/*:refs/remotes/origin/* # timeout=10
> git config remote.origin.url https://github.com/vero0311/calculator # timeout=10
> git config --add remote.origin.fetch +refs/heads/*:refs/remotes/origin/* # timeout=10
Avoid second fetch
> git rev-parse "refs/remotes/origin/master^{commit}" # timeout=10
Checking out Revision b2ec49664e0aa02b087274ba23f09bd99629c530 (refs/remotes/origin/master)
> git config core.sparsecheckout # timeout=10
> git checkout -f b2ec49664e0aa02b087274ba23f09bd99629c530 # timeout=10
Commit message: "Calculator project"
First time build. Skipping changelog.
[Actividad-1-Calculator] $ cmd /c call C:\Users\JOAN-1.ZOR\AppData\Local\Temp\jenkins18183477349667089871.bat

C:\Users\joan.zorovich\.jenkins\workspace\Actividad-1-Calculator>cd src

C:\Users\joan.zorovich\.jenkins\workspace\Actividad-1-Calculator\src>javac Calculator.java

C:\Users\joan.zorovich\.jenkins\workspace\Actividad-1-Calculator\src>fsutil file createnew Manifest.txt 0
'fsutil' is not recognized as an internal or external command,
operable program or batch file.

C:\Users\joan.zorovich\.jenkins\workspace\Actividad-1-Calculator\src>echo Main-class: Calculator 1>Manifest.txt

C:\Users\joan.zorovich\.jenkins\workspace\Actividad-1-Calculator\src>jar cfm JarCalculator.jar Manifest.txt Calculator.class

C:\Users\joan.zorovich\.jenkins\workspace\Actividad-1-Calculator\src>echo C:\Users\joan.zorovich\.jenkins\workspace\Actividad-1-Calculator\src
C:\Users\joan.zorovich\.jenkins\workspace\Actividad-1-Calculator\src

C:\Users\joan.zorovich\.jenkins\workspace\Actividad-1-Calculator\src>exit 0
Finished: SUCCESS
```

- Aqui podemos ver la ruta de la carpeta donde se creo la build

```
C:\Users\joan.zorovich\.jenkins\workspace\Actividad-1-Calculator\src
```

