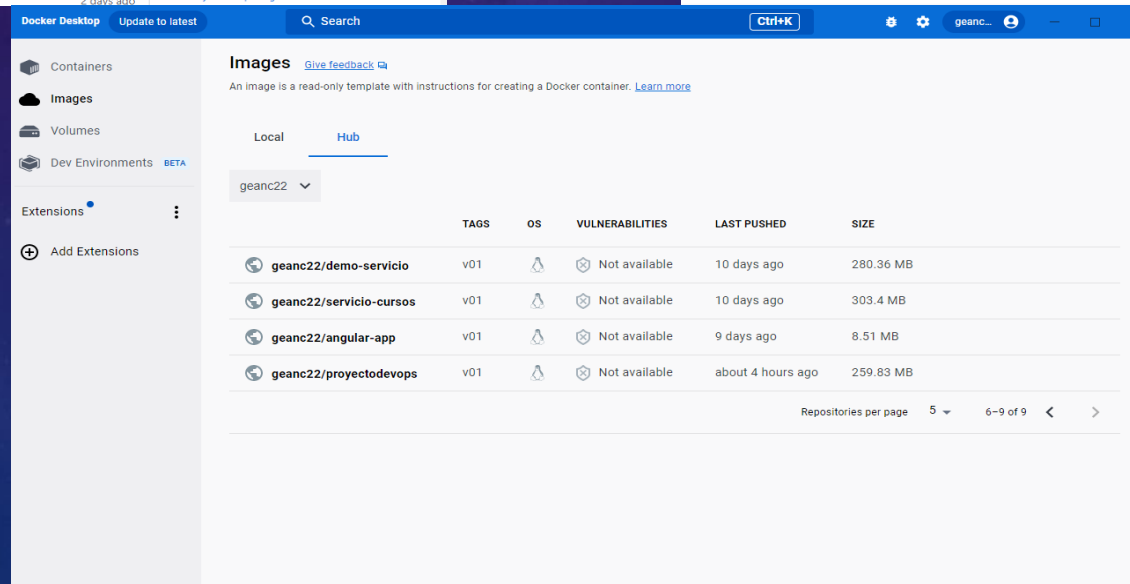
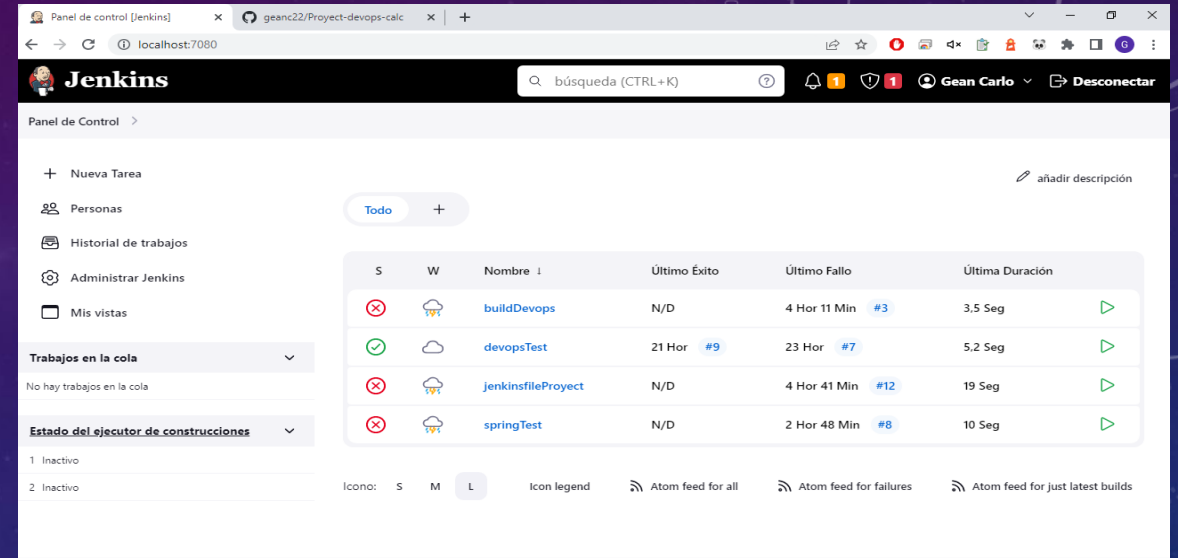
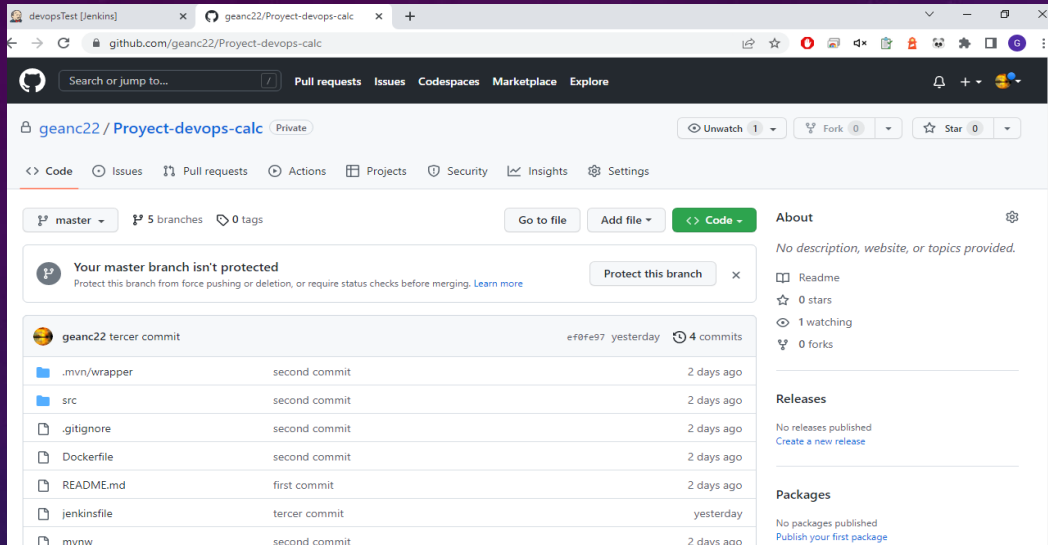


The background is a gradient of dark blue and purple. It features several faint, white, concentric circles and arcs. A prominent circular scale with degree markings (40, 150, 160, 170, 180, 190, 200, 210, 220, 230, 240, 250, 260) is visible on the left side. Other smaller circular elements with arrows are scattered across the image, suggesting a theme of rotation or cycles.

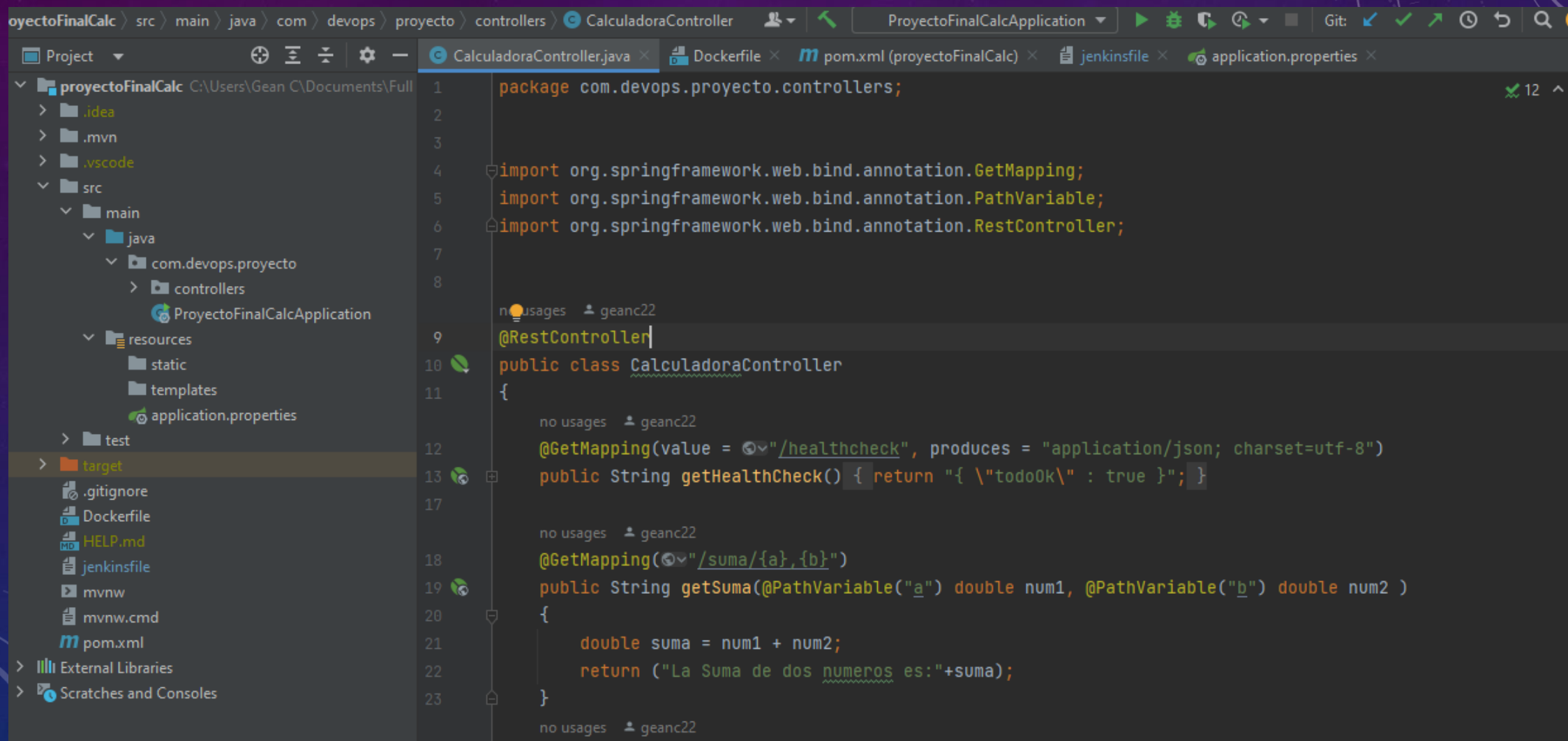
# DEVOPS

POR: CARRION HUACANI GEAN CARLO

# INSTALACIÓN DE HERRAMIENTAS NECESARIAS PARA: CONTROL DE VERSIONES + JENKINS + DOCKERHUB



# CREACIÓN DE UNA APLICACIÓN QUE SUME 2 NÚMEROS QUE SEA SOLICITADA MEDIANTE UNA PETICIÓN REST



The screenshot shows an IDE window with the following components:

- Project Explorer (Left):** Displays the project structure for 'proyectoFinalCalc'. The 'src/main/java/com/devops/proyecto/controllers' directory is expanded, showing the 'CalculadoraController.java' file.
- Code Editor (Right):** Contains the Java code for 'CalculadoraController.java'. The code includes imports for Spring Web MVC annotations and implements two REST endpoints: a health check and a sum calculation.

```
package com.devops.proyecto.controllers;

import org.springframework.web.bind.annotation.GetMapping;
import org.springframework.web.bind.annotation.PathVariable;
import org.springframework.web.bind.annotation.RestController;

@RestController
public class CalculadoraController
{
    @GetMapping(value = "/healthcheck", produces = "application/json; charset=utf-8")
    public String getHealthCheck() { return "{ \"todoOk\" : true }"; }

    @GetMapping("/suma/{a},{b}")
    public String getSuma(@PathVariable("a") double num1, @PathVariable("b") double num2 )
    {
        double suma = num1 + num2;
        return ("La Suma de dos numeros es:"+suma);
    }
}
```



# DOCKERIZAR LA APLICACIÓN


Docker Desktop




Update to latest


Search


Ctrl+K





geanc... 





 Containers

 Images

 Volumes

 Dev Environments BETA

Extensions 


 Add Extensions

Images [Give feedback](#)













An image is a read-only template with instructions for creating a Docker container. [Learn more](#)

LocalHub

470.81 MB / 4.68 GB in use 25 images

Last refresh: about 6 hours ago 

Search

<input type="checkbox"/>	Name	Tag	Status	Created ↓	Size	Actions
<input type="checkbox"/>	jenkins/jenkins 64d9498173fc 	jdk11	<a href="#">In use</a>	1 day ago	470.81 MB	  
<input type="checkbox"/>	geanc22/proyectodevops c314c693a3dd 	v01	Unused	5 days ago	489.95 MB	  
<input type="checkbox"/>	proyectodevops c314c693a3dd 	v01	Unused	5 days ago	489.95 MB	  

geanc22/proyectodevops genera x

+

hub.docker.com/repository/docker/geanc22/proyectodevops/general

Google, GitHub, Docker, etc.

geanc22 > Repositories > proyectodevops > General

Using 0 of 1 private repositories. [Get more](#)

General

Tags

Builds

Collaborators

Webhooks

Settings

Add a short description for this repository

[Update](#)

The short description is used to index your content on Docker Hub and in search engines. It's visible to users in search results.

geanc22 / proyectodevops

Description

This repository does not have a description

Last pushed: 4 hours ago

VULNERABILITY SCANNING - DISABLED

[Enable](#)

Docker commands

[Public View](#)

To push a new tag to this repository,

```
docker push geanc22/proyectodevops:tagname
```

Tags

This repository contains 1 tag(s).

Tag	OS	Type	Pulled	Pushed
<div><div></div>v01</div>	<div></div>	Image	---	4 hours ago

Automated Builds

Manually pushing images to Hub? Connect your account to GitHub or Bitbucket to automatically build and tag new images whenever your code is updated, so you can focus your time on creating.

Available with Pro, Team and Business subscriptions.



# CONFIGURACIÓN DE BRANCH EN EL CONTROL DE VERSIONES PARA CADA AMBIENTE

The screenshot shows a web browser with two tabs: 'Sign in [Jenkins]' and 'geanc22/Project-devops-calc'. The address bar shows 'github.com/geanc22/Project-devops-calc'. The GitHub interface includes a search bar, navigation links (Pull requests, Issues, Codespaces, Marketplace, Explore), and repository controls (Unwatch, Fork, Star). The repository name 'geanc22 / Project-devops-calc' is highlighted in yellow, with a 'Private' label. Below the repository name, there are tabs for Code, Issues, Pull requests, Actions, Projects, Security, Insights, and Settings. The 'Code' tab is active, showing a dropdown menu for 'master' with '5 branches' and '0 tags'. The 'Switch branches/tags' dropdown is open, displaying a search bar 'Find or create a branch...' and a list of branches: 'master' (default), 'Dev', 'Prod', 'main', and 'test'. The 'Dev', 'Prod', 'main', and 'test' branches are highlighted in yellow. Below the list is a link 'View all branches'. The main content area shows a commit history table with columns for commit hash, message, and time. The table lists several commits, including 'second commit' and 'first commit'. The right sidebar contains 'About' information (No description, website, or topic), 'Releases' (No releases published), and 'Packages'.

Sign in [Jenkins] x geanc22/Project-devops-calc x +

github.com/geanc22/Project-devops-calc

Search or jump to... / Pull requests Issues Codespaces Marketplace Explore

geanc22 / Project-devops-calc Private

Unwatch 1 Fork 0 Star

<> Code Issues Pull requests Actions Projects Security Insights Settings

master 5 branches 0 tags

Go to file Add file <> Code

About

No description, website, or topic

Readme

0 stars

1 watching

0 forks

Releases

No releases published

Create a new release

Packages

Switch branches/tags

Find or create a branch...

Branches Tags

✓ master default

Dev

Prod

main

test

View all branches

second commit 2 days ago

second commit 2 days ago

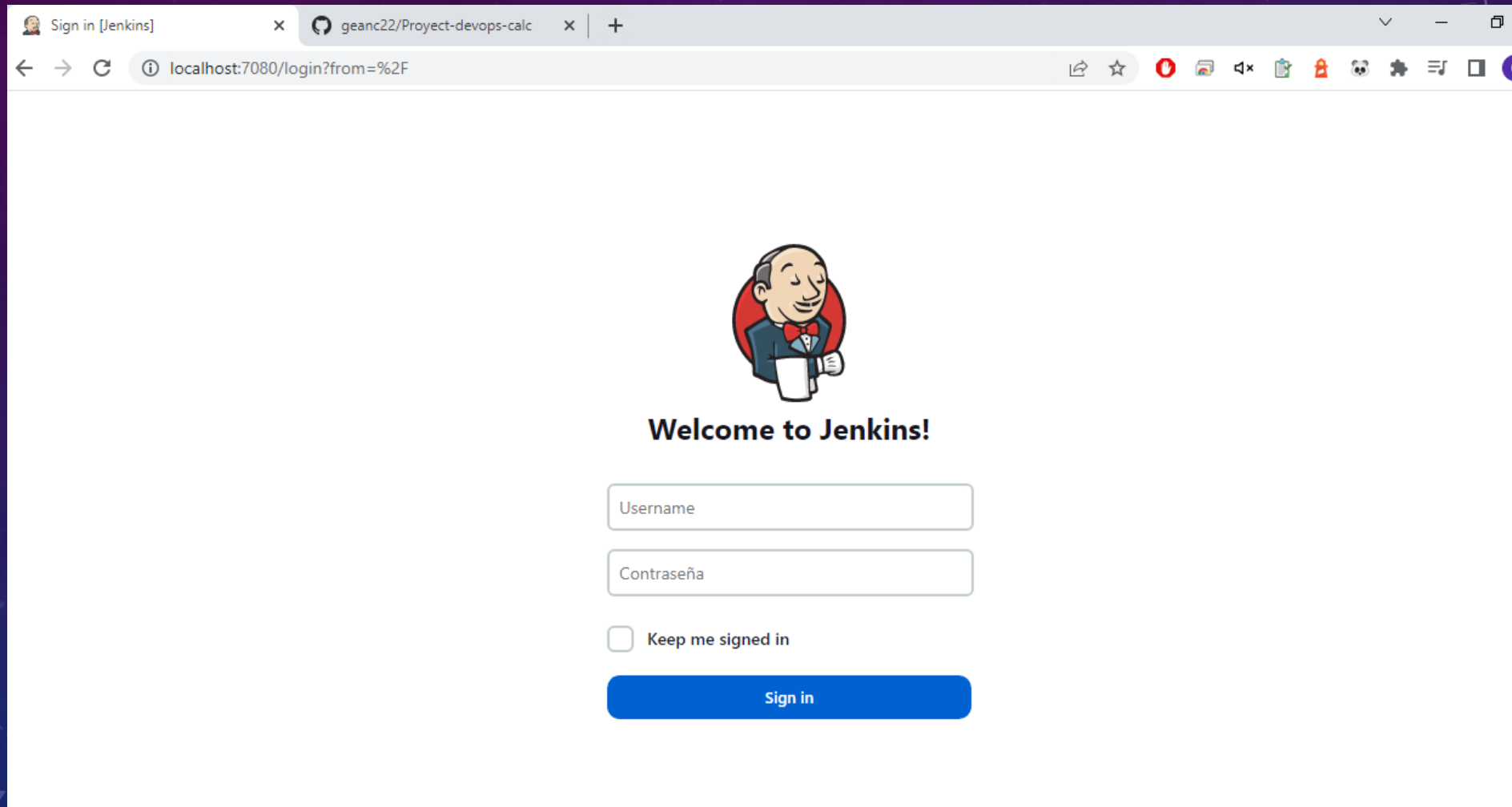
second commit 2 days ago

second commit 2 days ago

first commit 2 days ago

tercer commit yesterday


# CONFIGURACIÓN DE PLUGINS, CREDENCIALES Y JOB EN JENKINS PARA CADA AMBIENTE



The image shows a web browser window with the Jenkins login page. The browser's address bar shows the URL `localhost:7080/login?from=%2F`. The page features the Jenkins logo, a cartoon character in a tuxedo, and the text "Welcome to Jenkins!". Below this, there are two input fields for "Username" and "Contraseña" (Password). A checkbox labeled "Keep me signed in" is present, and a blue "Sign in" button is at the bottom.

Sign in [Jenkins] x geanc22/Proyect-devops-calc x +

localhost:7080/login?from=%2F



**Welcome to Jenkins!**

Username

Contraseña

☐ Keep me signed in

Sign in

Panel de Control &gt; Administrar Jenkins &gt; Gestor de plugins

- Updates
- Available plugins
- Installed plugins
- Advanced settings
- Download progress

## Plugins

Q pipeline

Nombre ↓

Activados

**Pipeline** 590.v6a\_d052e5a\_a\_b\_5

A suite of plugins that lets you orchestrate automation, simple or complex. See [Pipeline as Code with Jenkins](#) for more details.

[Report an issue with this plugin](#)**Pipeline Graph Analysis Plugin** 202.va\_d268e64deb\_3

Provides a REST API to access pipeline and pipeline run data.

[Report an issue with this plugin](#)**Pipeline: API** 1208.v0cc7c6e0da\_9e

Panel de Control &gt; Administrar Jenkins &gt; Gestor de plugins

Download progress

Q GIT

[Report an issue with this plugin](#)[Report an issue with this plugin](#)**Git plugin** 5.0.0

This plugin integrates [Git](#) with Jenkins.

[Report an issue with this plugin](#)**GitHub API Plugin** 1.303-400.v35c2d8258028

This plugin provides [GitHub API](#) for other plugins.

[Report an issue with this plugin](#)**GitHub Branch Source Plugin** 1701.v00cc8184df93

Multibranch projects and organization folders from GitHub. Maintained by CloudBees, Inc.

[Report an issue with this plugin](#)**GitHub plugin** 1.36.1

This plugin integrates [GitHub](#) to Jenkins.

[Report an issue with this plugin](#)**Pipeline: GitHub Groovy Libraries** 38.v445716ea\_edda\_

Allows Pipeline Groovy libraries to be loaded on the fly from GitHub.

[Report an issue with this plugin](#)



# CONFIGURACIÓN Y EJECUCIÓN DEL JENKINSFILE PARA EL PROCESO DE CI/CD.

```
jenkinsfile x CalculadoraController.java pom.xml
jenkinsfile
1 pipeline {
2   agent any
3   /* tools {
4     | maven 'maven_3_8_7'
5   } */
6   tools {
7     | maven 'M3'
8   }
9   stages {
10
11   stage("Source GIT") {
12     agent any
13     steps {
14       | git branch: 'main', url: 'https://ghp_6R1DwrF148YTKL704HrdSFsW82tzcp3G80d5@github.com/geanc
15       | //mvnHome = tool 'M3'
16     }
17   }
18
19   stage("Build") {
20     agent any
21     steps {
22       | sh 'mvn -B -DskipTests clean package'
23     }
24   }
25
26   stage("SonarQube Analisis") {
27     agent any
28     steps {
29       | sh 'mvn sonar:sonar'
30     }
31   }
32
33   stage("Approve Deployment") {
34     agent any
35   }
```

Status

Pipeline devopsTest

</> Changes

▶ Construir ahora

⚙ Configurar

🗑 Borrar Pipeline

🔍 Full Stage View

✎ Rename

❓ Pipeline Syntax

Historia de tareas

Tendencia ▼

🔍 Filter builds...

#9 2 feb 2023 17:02 No Changes

#8 2 feb 2023 15:08 1 commit

Stage View

Average stage times:  
(Average full run time: ~4s)

Declarative: Checkout SCM	test	Build application	prod
2s	229ms	155ms	104ms
1s	165ms	94ms	102ms
2s	134ms	122ms	115ms

**1****1**

Gean Carlo ▾



Descon

Panel de Control &gt; devopsTest &gt;



Status



Changes



Construir ahora



Configurar



Borrar Pipeline



Full Stage View



Rename



Pipeline Syntax



Historia de tareas

Tendencia ▾



Filter builds...



#9

2 feb 2023 17:02

#9

feb 02  
17:02No  
Changes

#8

feb 02  
15:081  
commit

## Pipeline devopsTest



añadir descripción

Desactivar el Proyecto

### Stage View

Average stage times:  
(Average full run time: ~4s)Declarative:  
Checkout SCM

test

Build  
application

prod

2s

229ms

155ms

104ms

1s

165ms

94ms

102ms

2s

134ms

122ms

115ms