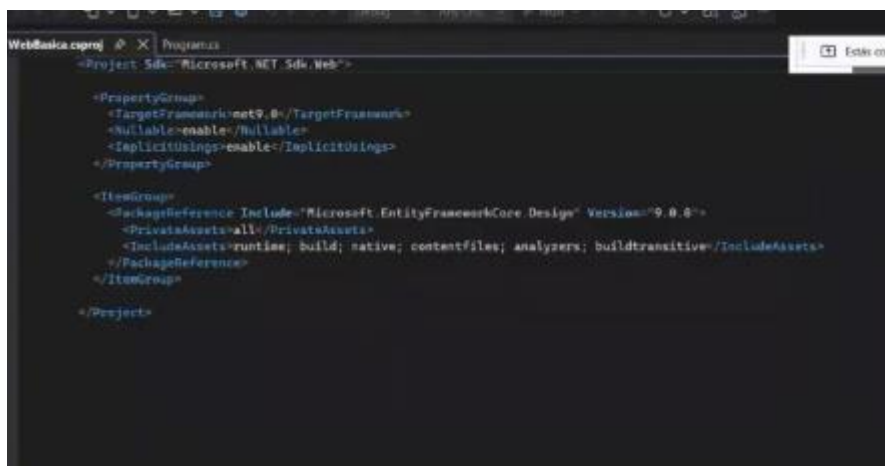
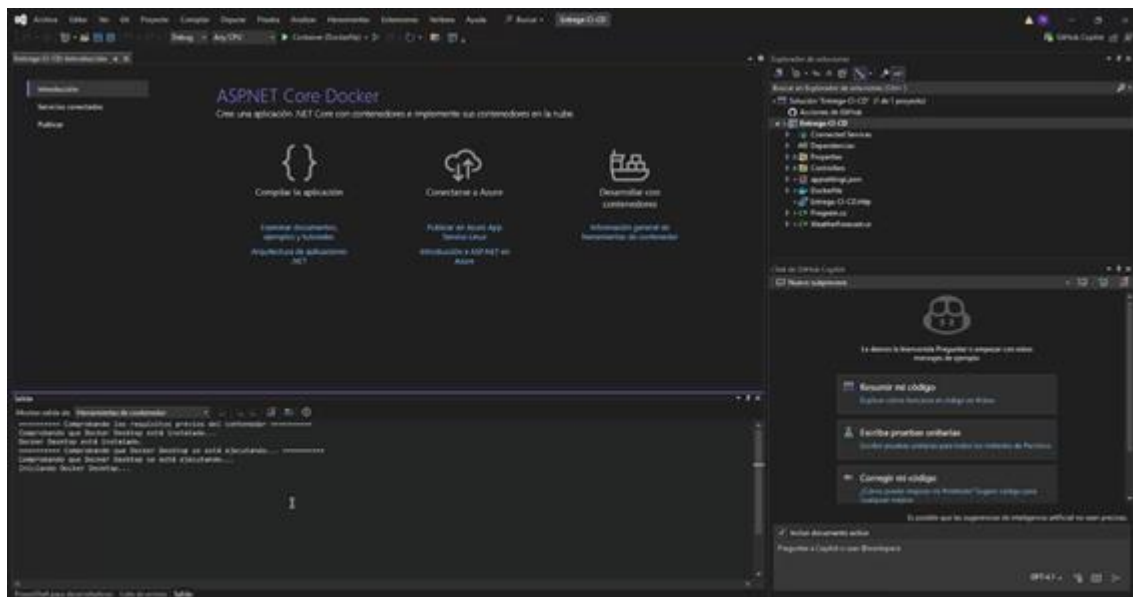
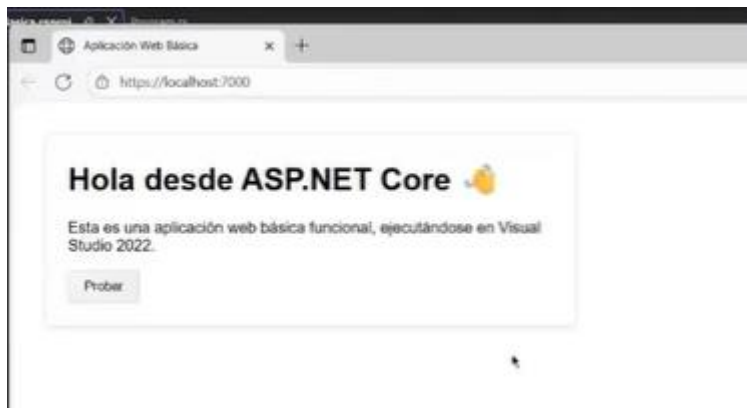


Práctica final - Integración Continua (CI)

Actividad 1: Integración Continua (CI)

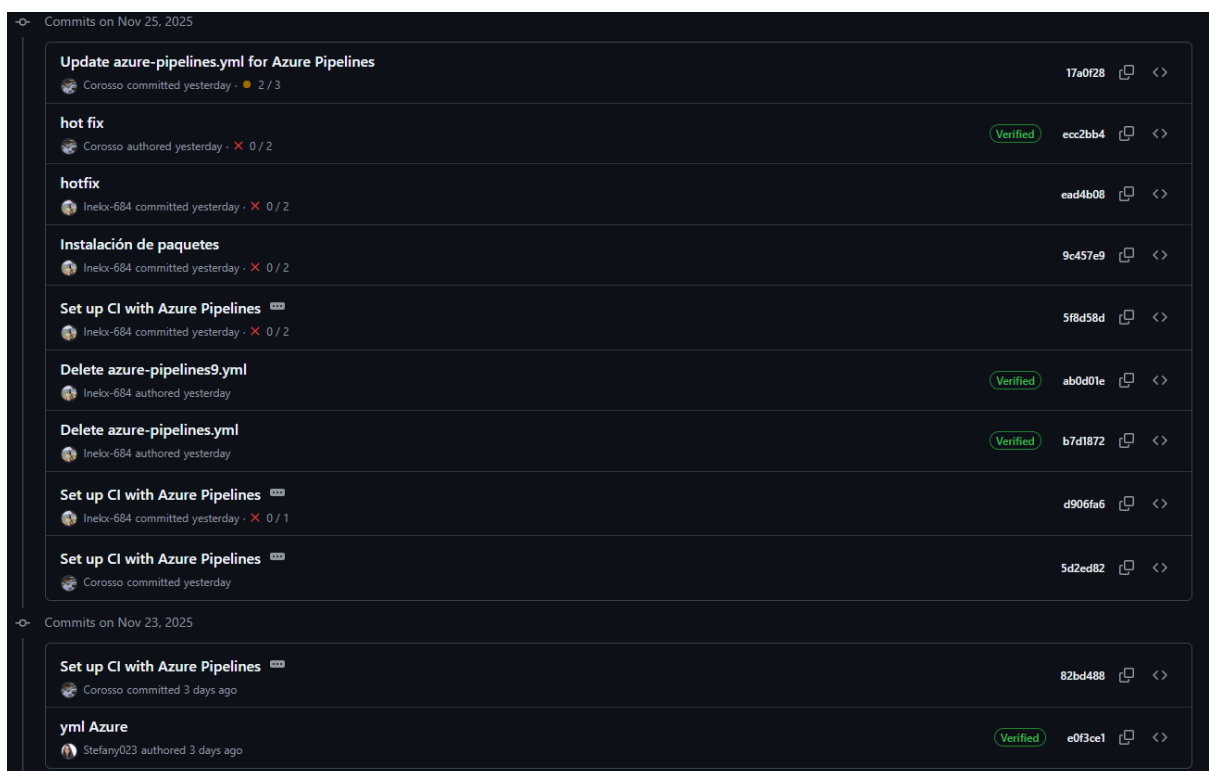
1. Configuración del Proyecto - Crea un proyecto en Visual Studio 2022 con .NET Core 9. - Implementa una aplicación básica funcional (API, aplicación web, etc.).



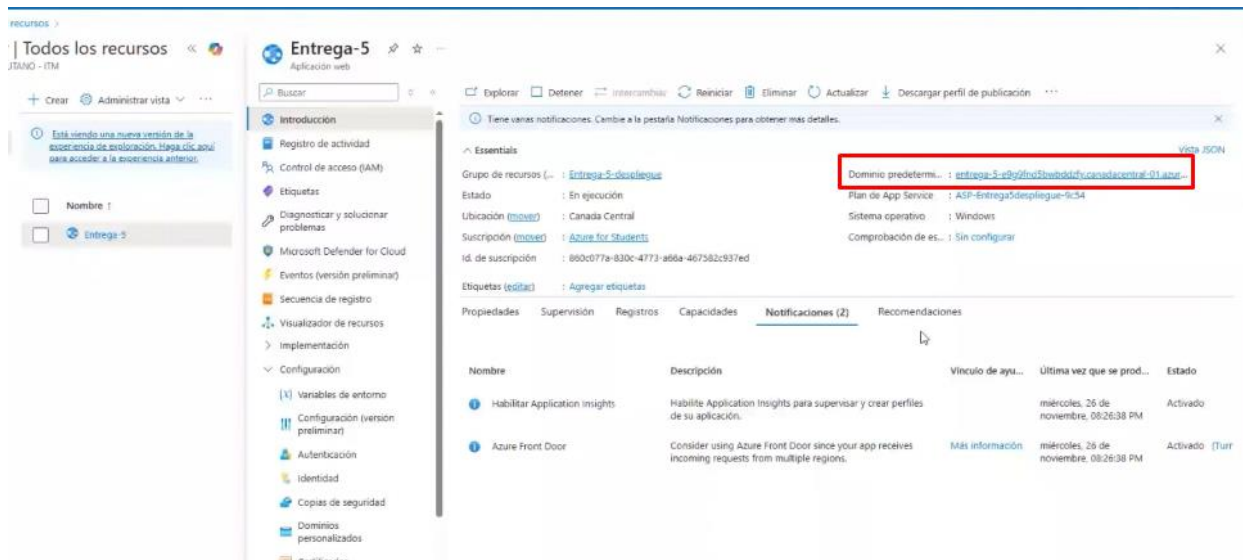


2. Control de Versiones - Usa un repositorio en GitHub y vincúlalo al proyecto. - Realiza múltiples commits significativos.

```
PowerShell para desarrolladores
+ PowerShell para desarrolladores
create mode 100644 Entrega-CI-CD/obj/Entrega-CI-CD.csproj.nuget.g.targets
create mode 100644 Entrega-CI-CD/obj/project.assets.json
create mode 100644 Entrega-CI-CD/obj/project.nuget.cache
PS C:\Users\USER\Documents\Despliegue de software\Entrega-CI-CD> git push -u origin main
Enumerating objects: 54, done.
Counting objects: 100% (54/54), done.
Delta compression using up to 16 threads
Compressing objects: 100% (47/47), done.
Writing objects: 100% (54/54), 81.20 KiB | 4.27 MiB/s, done.
Total 54 (delta 3), reused 0 (delta 0), pack-reused 0 (from 0)
remote: Resolving deltas: 100% (3/3), done.
To https://github.com/Corosso/Entrega-Final-CI-CD.git
 * [new branch] main -> main
branch 'main' set up to track 'origin/main'.
PS C:\Users\USER\Documents\Despliegue de software\Entrega-CI-CD> git add "azure-pipelines9.yml"
fatal: pathspec 'azure-pipelines9.yml' did not match any files
PS C:\Users\USER\Documents\Despliegue de software\Entrega-CI-CD>
```

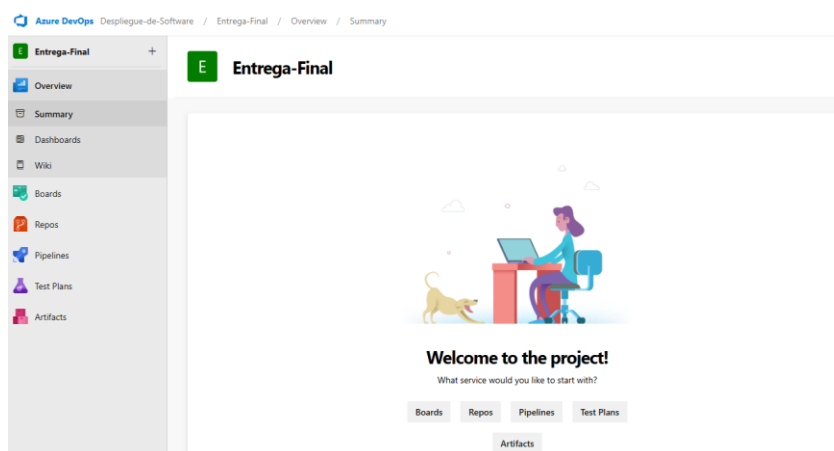


-> verificación del Appservice dese Azure



3. Pipeline CI en Azure DevOps - Configura un pipeline que compile el código automáticamente, ejecute pruebas (si las hay), y genere artefactos. - El pipeline debe activarse con cada cambio en la rama principal (main o master).

-> Creamos la organización




-> Se llena el formulario para aprobación ya que Microsoft quitó el paralelismo por defecto, ahora hay que solicitarlo.


Azure DevOps Parallelism Request

This form is for users to request increased parallelism in Azure DevOps.


It can take several business days to process your free tier requests. During certain time periods, processing times might be longer.

1. What is your name? * 

Stefany Builes Iopera


2. What is your email address? * 

stefanybuiiles287828@correo.itm.edu.co

3. What is the name of your Azure DevOps Organization? * 

(E.g. for <https://myorganization.visualstudio.com> or <https://dev.azure.com/myorganization> link formats - organization name would be 'myorganization')

<https://dev.azure.com/Despliegue-de-Software>

4. Are you requesting a parallelism increase for Public or Private projects? * 

☒ Private

☐ Public

->Deshabilitar dos opciones que permitirán manejar el release para el próximo punto (CD)

Organization Settin...
Despliegue-de-Software

Search Settings

General

Overview

Projects

Users

Billing

Global notifications

Usage

Extensions

Microsoft Entra

Security

Security overview

Policies

Permissions

Boards

Process

Pipelines

Agent pools

Settings

Deployment pools

Parallel jobs

Settings

General

☒ On

Disable anonymous access to badges

Anonymous users can access the status badge API for all pipelines unless this option is enabled (does not apply to public projects).

☒ On

Limit variables that can be set at queue time

You can set any variables at queue time unless this option is enabled. With this option enabled, only those variables that are explicitly marked as "Settable at queue time" can be set. [Learn more](#)

☒ On

Limit job authorization scope to current project for non-release pipelines

Non-Release Pipelines can run with collection scoped access tokens unless this option is enabled. With this option enabled, you can reduce the scope of access for all non-release pipelines to the current project.

☒ On

Limit job authorization scope to current project for release pipelines

Release pipelines can run with collection scoped access tokens unless this option is enabled. With this option enabled, you can reduce the scope of access for all release pipelines to the current project.

☒ On

Protect access to repositories in YAML pipelines

Apply checks and approvals when accessing repositories from YAML pipelines. Also, generate a job access token that is scoped to repositories that are explicitly referenced in the YAML pipeline.

☐ Off

Disable stage chooser

With this enabled, users will not be able to select stages to skip from the Queue Pipeline panel.

☐ Off

Disable creation of classic build pipelines

No classic build pipelines can be created / imported. Existing ones will continue to work.

☐ Off

Disable creation of classic release pipelines


No classic release pipelines, task groups, and deployment groups can be created / imported. Existing ones will continue to work.

-> Seleccionar pipelines -> crear nuevo pipeline

Azure DevOps Despliegue-de-Software / Entrega-Final / Pipelines

Entrega-Final +

- Overview
- Boards
- Repos
- Pipelines
- Pipelines
- Environments
- Library
- Test Plans
- Artifacts



Create your first Pipeline

Automate your build and release processes using our wizard, and go from code to cloud-hosted within minutes.

Create Pipeline

-> se escoge opción del repositorio

Azure DevOps Despliegue-de-Software / Entrega-Final / Pipelines

Entrega-Final +

- Overview
- Boards
- Repos
- Pipelines
- Pipelines
- Environments
- Library
- Test Plans
- Artifacts

Connect Select Configure Review

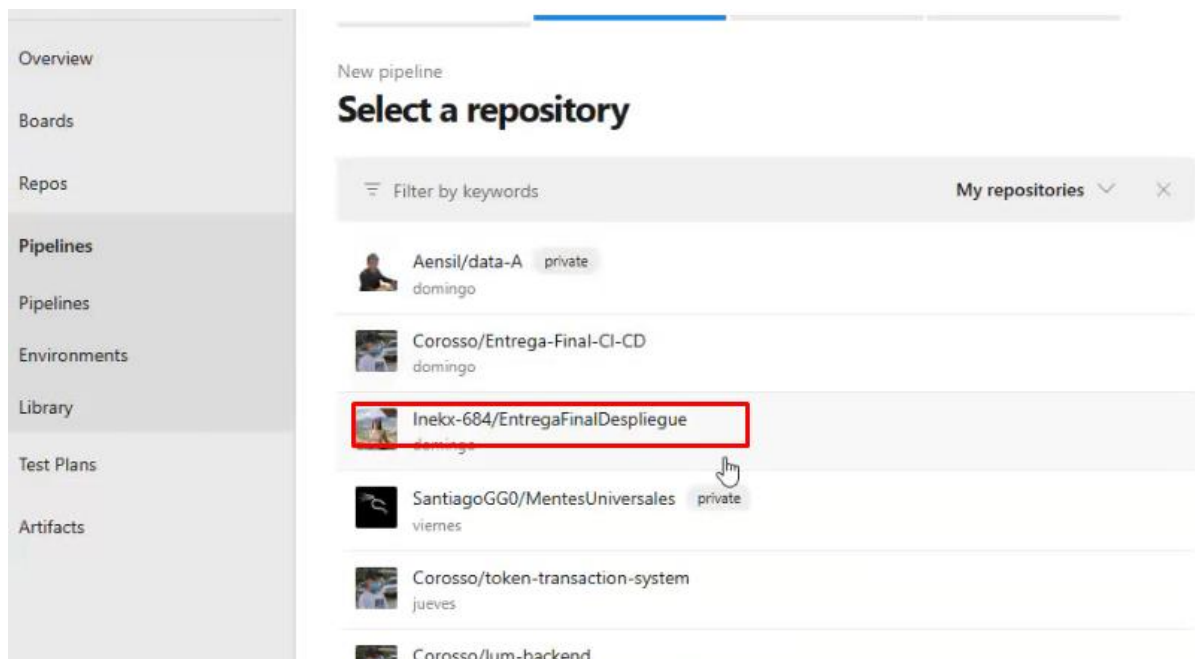
New pipeline

Where is your code?

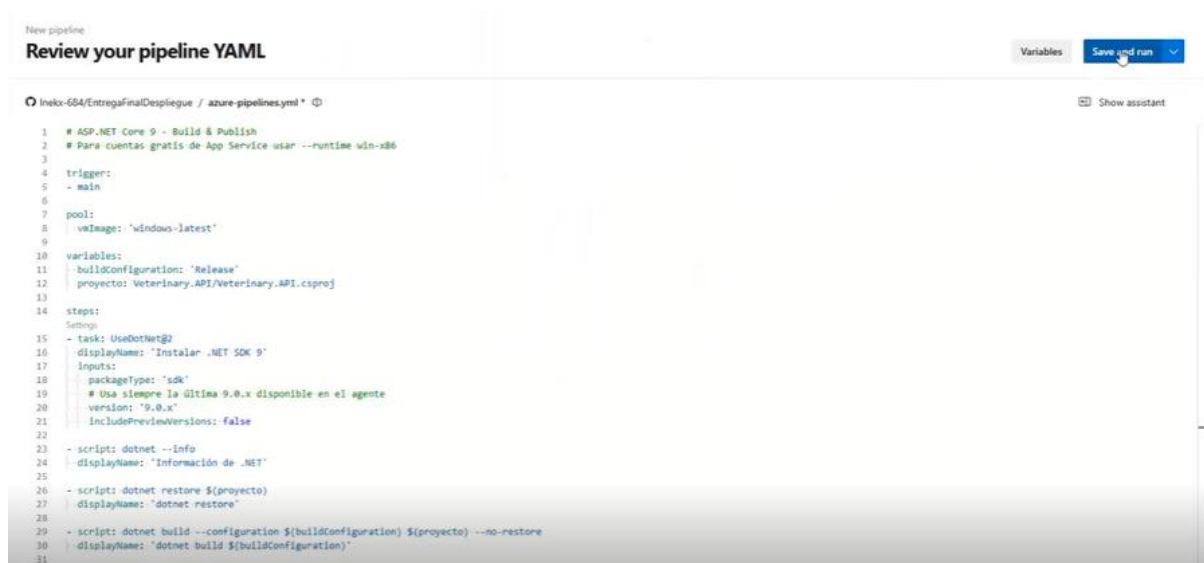
- Azure Repos Git YAML
Free private Git repositories, pull requests, and code search
- GitHub YAML
Home to the world's largest community of developers
- Bitbucket Cloud YAML
Hosted by Atlassian

More options

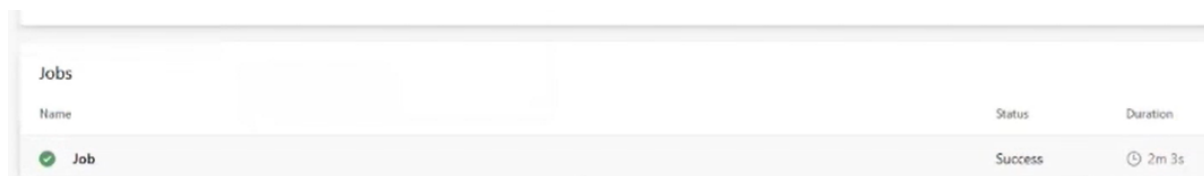
-> se escoge el repositorio creado



-> Seleccionar save and run



-> Se valida terminación del proceso del Job



←

Jobs in run #20251127.1

Inelox-684.EntregaFinalDespliegue (4)

Jobs

✓

Job

2m 3s

Initialize job

9s

✓

Checkout Inelox-684/EntregaFinal...

6s

✓

Instalar .NET SDK 9

24s

✓

Información de .NET

2s

✓

dotnet restore

3s

✓

dotnet build Release

20s

✓

Instalar EF Core CLI 9

3s

✓

Publicar aplicación

12s

✓

Publicar artefactos

38s

✓

Post-job: Checkout Inelox-684/En...

<1s

Finalize Job

<1s

✓ Job

1 Pool: Azure Pipelines

2 Image: windows-latest

3 Queued: Today at 20:44 ([manage parallel jobs](#))

4 Agent: Hosted Agent

5 Started: Today at 20:44

6 Duration: 2m 3s

7

8 The agent request is already running or has already completed.

9 ▶ Job preparation parameters

44 1 artifact produced

45 Job live console data:

46 Starting: Job

47 Async Command Start: DetectDockerContainer

48 Async Command End: DetectDockerContainer

49 Async Command Start: DetectDockerContainer

50 Async Command End: DetectDockerContainer

51 Finishing: Job

-> se realiza varios commit

PowerShell para desarrolladores

+ PowerShell para desarrolladores

to set your account's default identity.

mit --global to set the identity only in this repository.

Fatal: unable to auto-detect email address (got 'ASUS@Desktop-de-Sofia.(none)')

PS C:\Users\ASUS\source\repos\EntregaFinalDespliegue> git config --global user.email "sofiaortizserna684@gmail.com"

PS C:\Users\ASUS\source\repos\EntregaFinalDespliegue> git commit -m "Instalación de paquetes"

Lista de errores

PowerShell para desarrolladores

PowerShell para desarrolladores

+ PowerShell para desarrolladores

create mode 100644 WebBasica/obj/Release/net9.0/WebBasica.AssemblyInfo.cs

create mode 100644 WebBasica/obj/Release/net9.0/WebBasica.AssemblyInfoInputs.cache

create mode 100644 WebBasica/obj/Release/net9.0/WebBasica.GeneratedMSBuildEditorConfig.editorconfig

create mode 100644 WebBasica/obj/Release/net9.0/WebBasica.GlobalUsings.g.cs

create mode 100644 WebBasica/obj/Release/net9.0/WebBasica.assets.cache

PS C:\Users\ASUS\source\repos\EntregaFinalDespliegue> git push origin main

Lista de errores

PowerShell para desarrolladores

✓ Listo

← Inekx-684.EntregaFinalDespliegue (3)

Runs Branches Analytics

Description	Stages
#20251126.3 • Instalación de paquetes Manually run by main 9c457e9b	
#20251126.2 • Instalación de paquetes Individual CI for main 9c457e9b	
#20251126.1 • Set up CI with Azure Pipelines Individual CI for main 5f8d58d6	

migration, please refer to the blog on [Windows and Mac](#)

← Jobs in run #20251126.2
Inekx-684.EntregaFinalDespliegue (3)

Jobs

- Job 1m 2s
- Initialize job 11s
- Checkout Inekx-684/En... 6s
- Instalar .NET SDK 9 37s
- Información de .NET 3s
- dotnet restore 2s
- dotnet build Release
- Instalar EF Core CLI 9
- Generar script de BD
- Publicar aplicación

dotnet restore

```
1 Starting: dotnet restore
2
3 Task : Command line
4 Description : Run a command line script using Bash on Linux and macOS and cmd.exe on Windows
5 Version : 2.250.1
6 Author : Microsoft Corporation
7 Help : https://docs.microsoft.com/azure/devops/pipelines/tasks/utility/command-line
8
9 Generating script.
10 Script contents: shell
11 dotnet restore WebBasica/WebBasica.csproj
12 ----- Starting Command Output -----
13 "C:\Windows\system32\cmd.exe" /D /E:ON /V:OFF /S /C "CALL "D:\a\_teep\b075b6cd-aa62-4c2e-aba9-28e19d7cf763.cmd""
```

Problemas

- 1- Luego de 48 horas de mandar la solicitud de aprobación a Microsoft, No se contaba con permisos para la ejecución del pipeline

← Jobs in run #20251123.1
Corosio.Entrega-Final-CI-CD

Jobs

- Job

Job

```
1 #!error!No hosted parallelism has been purchased or granted. To request a free parallelism grant, please fill out the following form https://aka.ms/azpipelines-parallelism-request
2 Pool: Azure Pipelines
3 Image: windows-latest
4 Started: Today at 11:57
5 Duration: 48 47s
6
7 * Job preparation parameters
8 ContinueOnError: False
9 TimeoutInMinutes: 60
10 CancelTimeoutInMinutes: 5
11 Expand:
```


extension. After these dates, any pipelines using these images will fail, so it is important to migrate to supported images in advance. For details on the brownout schedule and guidance on migration, please refer to the blog on [Windows](#) and [Mac](#)

#20251126.1 • Set up CI with Azure Pipelines

Inekx-684.EntregaFinalDespliegue

Summary Code Coverage

Individual CI by Inekx-684

Repository and version
Inekx-684/EntregaFinalDespliegue
main d906fa6f

Time started and elapsed
Just now

Related
0 work items
0 artifacts

Tests and coverage
Get started

View change

Name	Status	Duration
Job	Queued	

2- En ejecución del Job del pipeline: presentaba problemas con un paquete Nuget en el cual la solución fue instalar la versión compatible 9.0.0

Jobs in run #20251126.1

Jobs
Job 1m 14s
Initialize job 8s
Checkout Inekx-684/En... 3s
Instalar .NET SDK 9 25s
Información de .NET 2s
dotnet restore 4s
dotnet build Release 18s
Instalar EF Core CLI 9 3s
Generar script de BD 6s
Publicar aplicación <1s

Generar script de BD

```
1 Starting: Generar script de BD
2 =====
3 Task : Command line
4 Description : Run a command line script using Bash on Linux and macOS and cmd.exe on Windows
5 Version : 2.250.1
6 Author : Microsoft Corporation
7 Help : https://docs.microsoft.com/azure/devops/pipelines/tasks/utility/command-line
8 =====
9 Generating script.
10 Script contents: shell
11 dotnet ef migrations script -i -o "D:\a\1\1\migrate.sql" --project "WebBasica/WebBasica.csproj"
12 ===== Starting Command Output =====
13 "C:\Windows\system32\cmd.exe" /D /E:ON /V:OFF /S /C "CALL "D:\a\_temp\eb6cd115-3702-41fd-b372-25477a9d3cfa.cmd""
14 Build started...
15 Build succeeded.
16 Your startup project 'WebBasica' doesn't reference Microsoft.EntityFrameworkCore.Design. This package is required for the Entity Framework Core tools.
17 ##[error]Cmd.exe exited with code '1'.
18 Finishing: Generar script de BD
```