PLATINIUM

ONIRYX

GOLD

delaware

GAMING1

GENESIS CONSULT
IT Consultancy Services

PARTNER

birdit

DevApps.be

meet innovate create

SENSE OF TECH

Sparkle

devday


10
YEARS
07.NOV.2024
DEVDAY
ELEVATING THE DEVELOPERS' COMMUNITY

Adrien
CLERBOIS

Christophe
PEUGNET

Microsoft MVP

Technical Architect

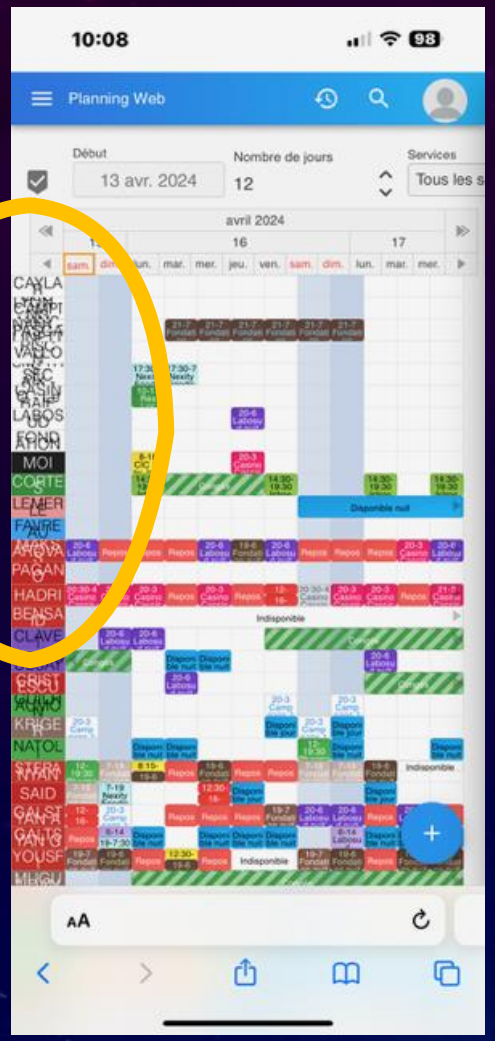
Microsoft MVP

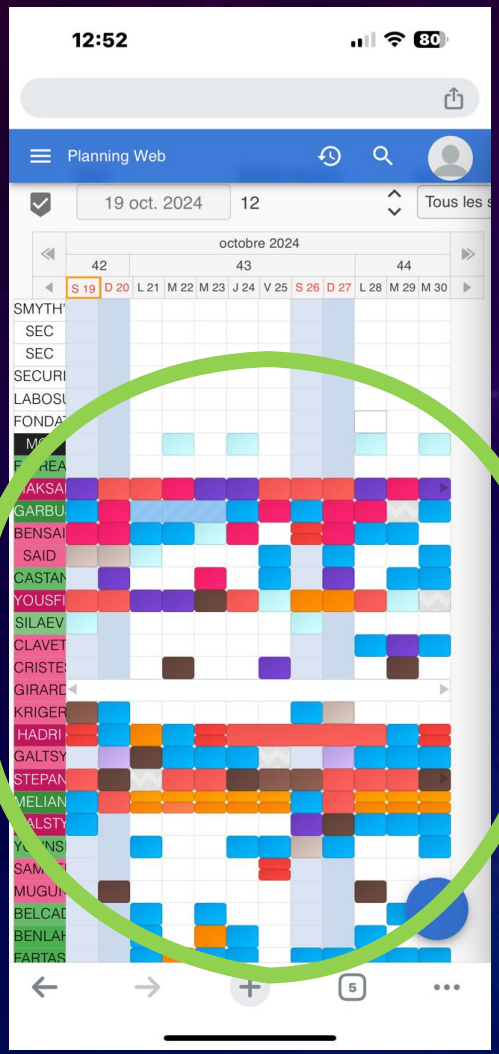
Formateur Blazor

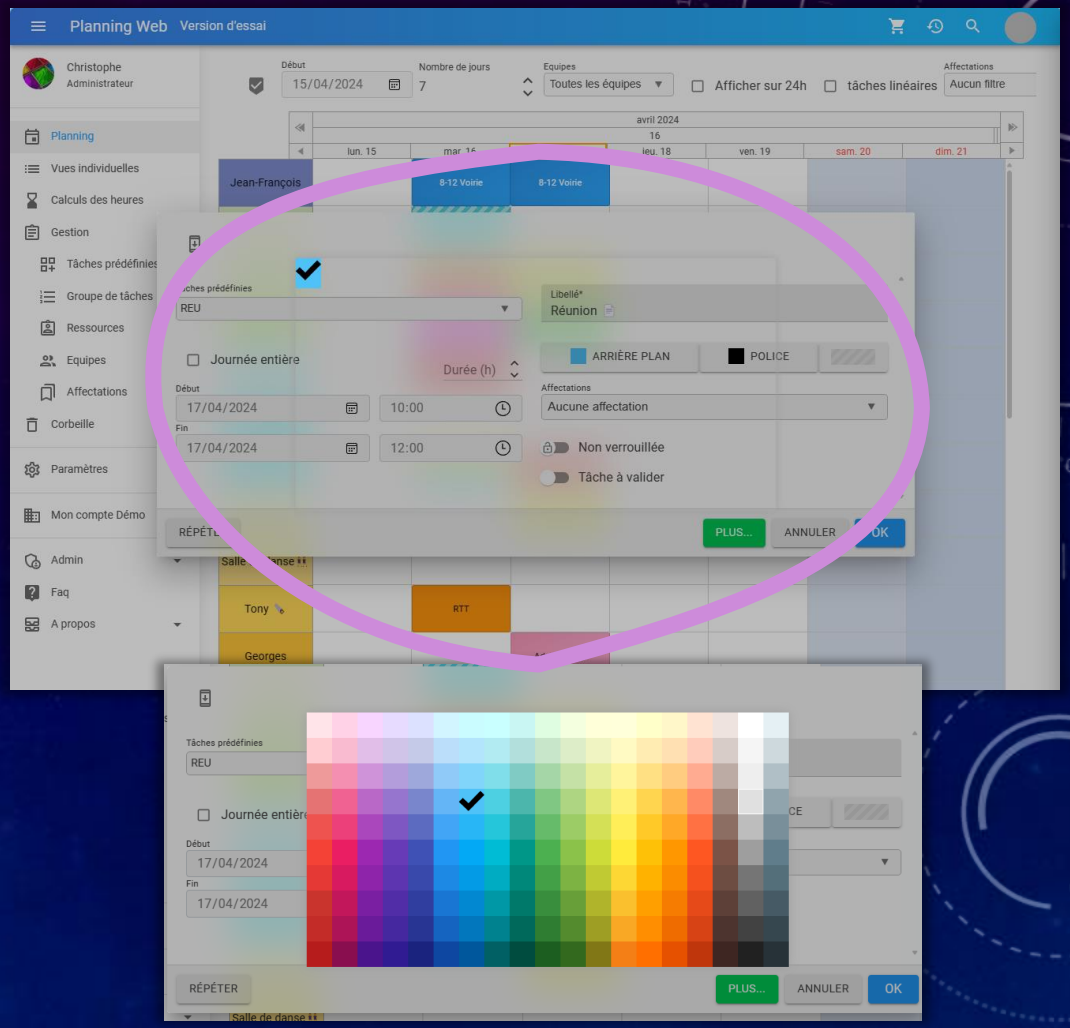
AClerbois

Christophe Peugnet


Playwright


10:08
Planning Web
Début
13 avr. 2024
Nombre de jours
12
Services
avril 2024

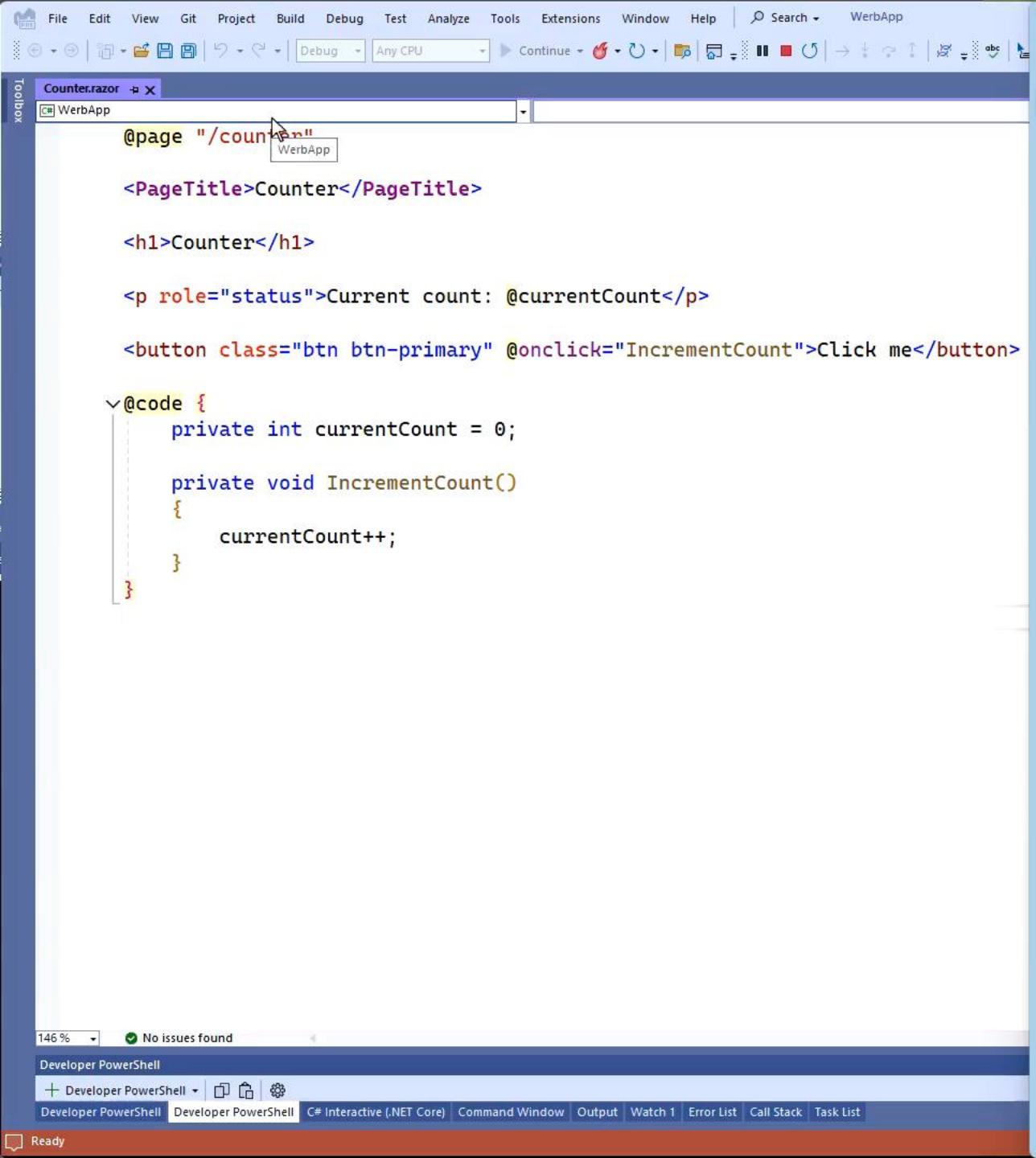

12:52
Planning Web
19 oct. 2024
12
octobre 2024

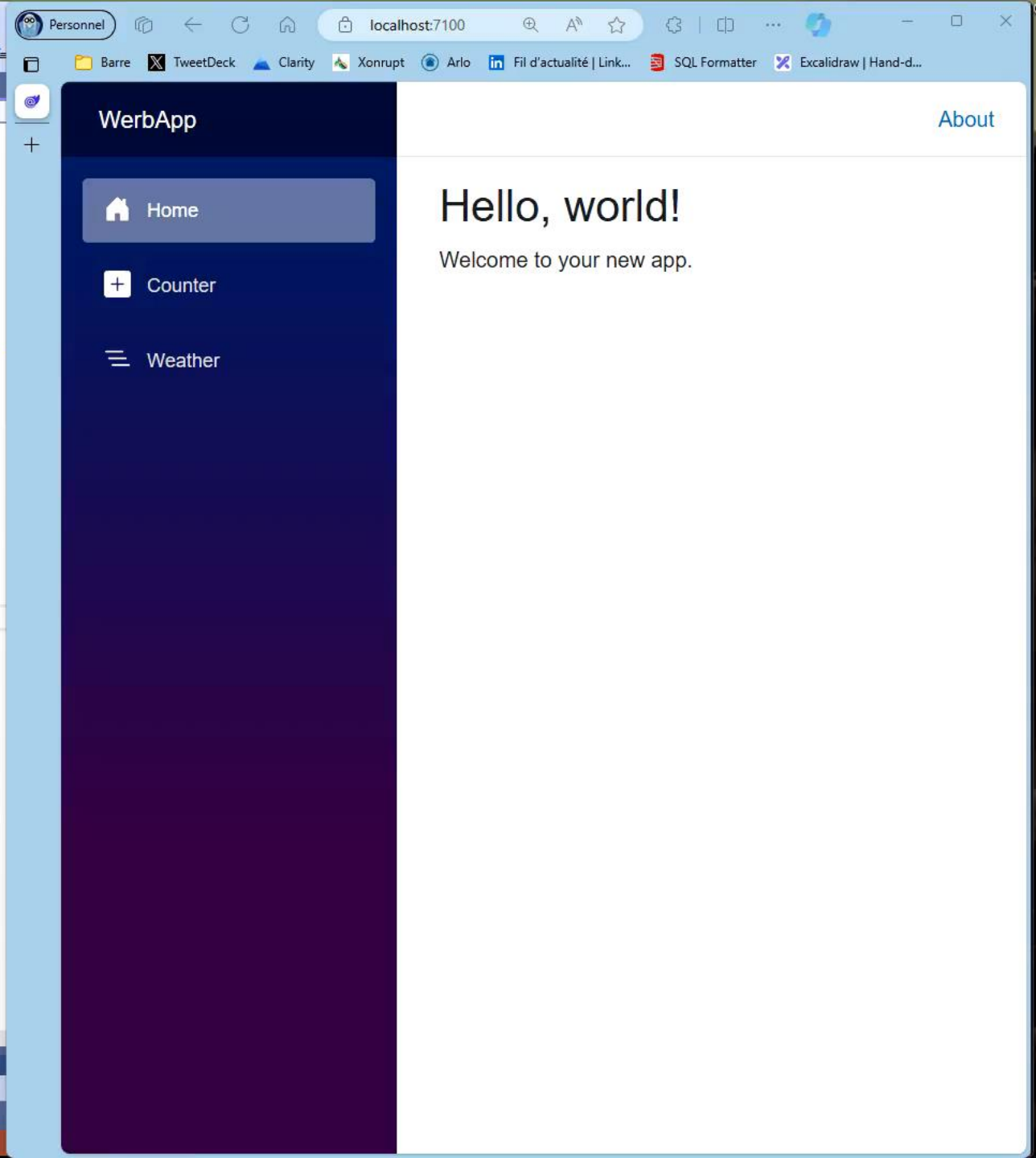

Planning Web
Version d'essai
Christophe
Administrateur
Planning
Vues individuelles
Calculs des heures
Gestion
Tâches prédéfinies
Groupe de tâches
Ressources
Equipes
Affectations
Corbeille
Paramètres
Mon compte Démo
Admin
Faq
A propos
Début
15/04/2024
Nombre de jours
7
Equipes
Toutes les équipes
Afficher sur 24h
tâches linéaires
Affectations
Aucun filtre
avril 2024
Jean-François
8-12 Voirie
Tâches prédéfinies
REU
Libellé*
Réunion
Journée entière
Durée (h)
ARRIÈRE PLAN
POLICE
Début
17/04/2024
10:00
Affectations
Aucune affectation
Fin
17/04/2024
12:00
Non verrouillée
Tâche à valider
RÉPÉTER
PLUS...
ANNULER
OK
Tony
RTT
Georges

Tâches prédéfinies
REU
Journée entière
Début
17/04/2024
Fin
17/04/2024
RÉPÉTER
PLUS...
ANNULER
OK

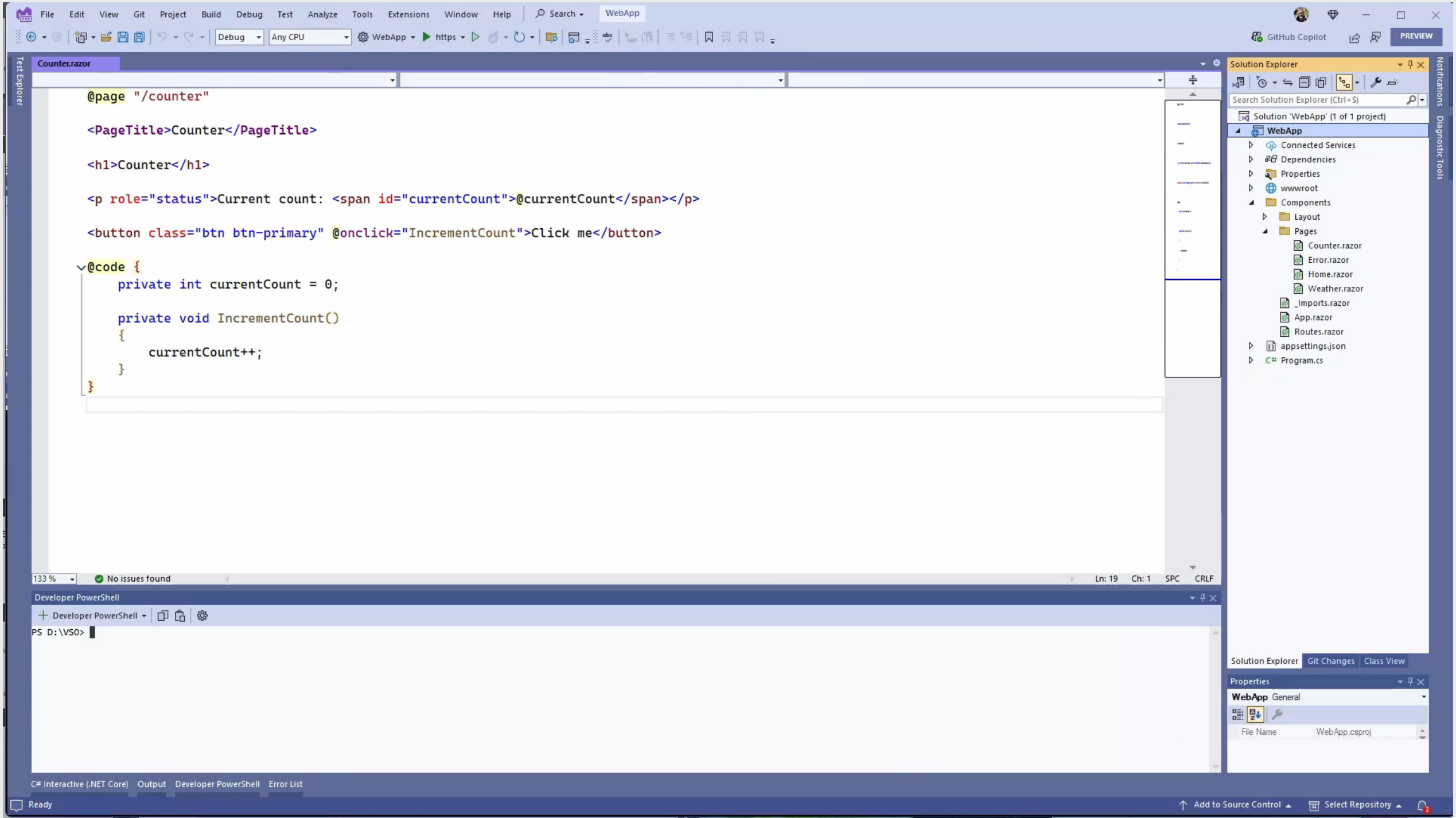
Tests
Sécurité,
charges,
métier
Tests IHM et tests
fonctionnels
Test de bout en bout
Tests d'intégrations
Tests Unitaires

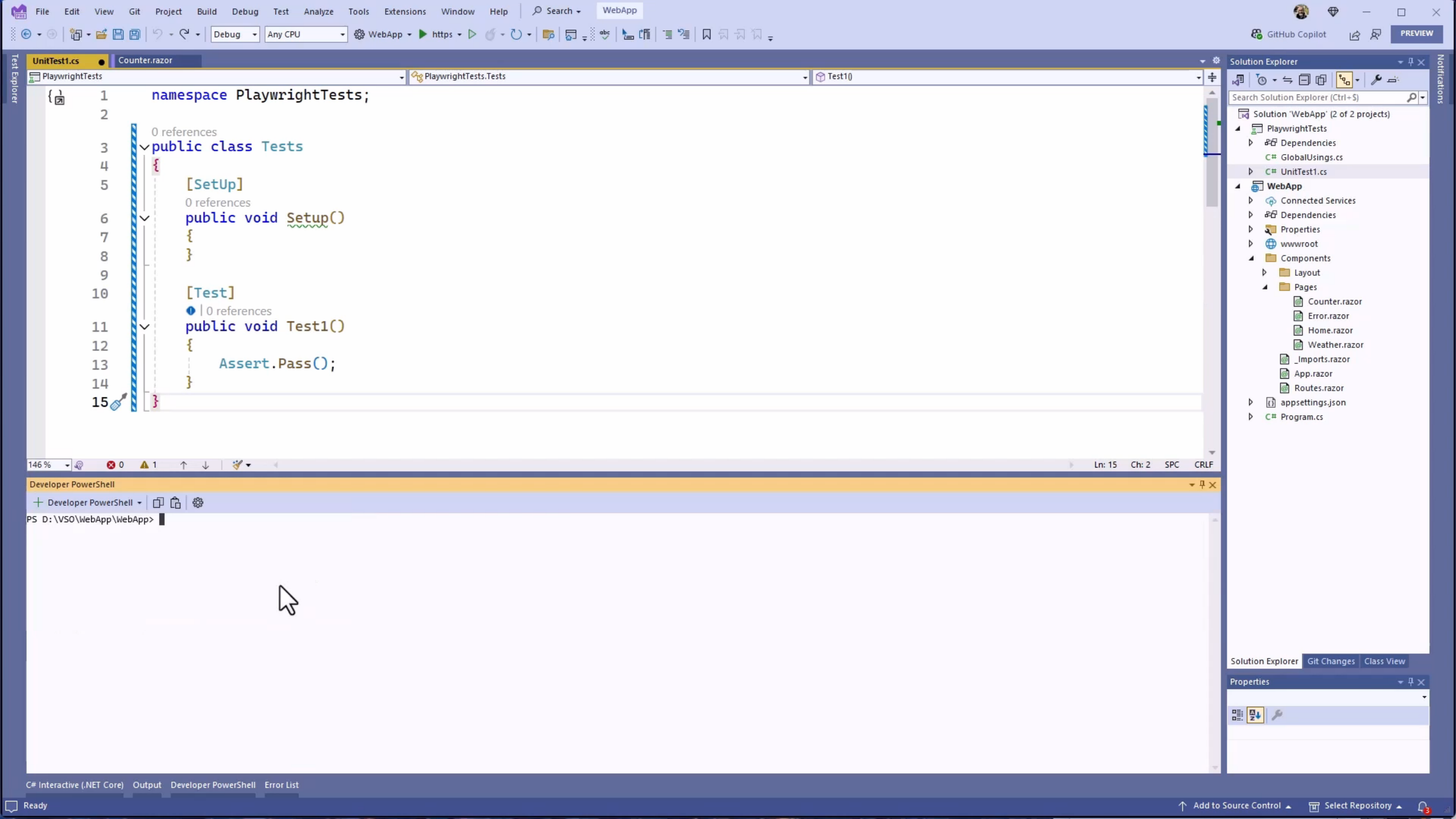

Playwright


File Edit View Git Project Build Debug Test Analyze Tools Extensions Window Help
Search
WerbApp
Debug
Any CPU
Continue
Toolbox
Counter.razor
WerbApp
@page "/counter"
WerbApp
<PageTitle>Counter</PageTitle>
<h1>Counter</h1>
Current count: @currentCount
<button class="btn btn-primary" @onclick="IncrementCount">Click me</button>
@code {
private int currentCount = 0;
private void IncrementCount()
{
currentCount++;
}
}
146 %
No issues found
Developer PowerShell
Developer PowerShell
Developer PowerShell
C# Interactive (.NET Core)
Command Window
Output
Watch 1
Error List
Call Stack
Task List
Ready


Personnel
localhost:7100
Barre
TweetDeck
Clarity
Xonrupt
Arlo
Fil d'actualité | Link...
SQL Formatter
Excalidraw | Hand-d...
WerbApp
About
Home
Counter
Weather
Hello, world!
Welcome to your new app.

COMMENT ON TEST ?


File Edit View Git Project Build Debug Test Analyze Tools Extensions Window Help
Search
WebApp
Debug
Any CPU
WebApp
https
GitHub Copilot
PREVIEW
Test Explorer
Counter.razor
@page "/counter"
<PageTitle>Counter</PageTitle>
<h1>Counter</h1>
Current count: @currentCount
<button class="btn btn-primary" @onclick="IncrementCount">Click me</button>
@code {
private int currentCount = 0;
private void IncrementCount()
{
currentCount++;
}
}
133 %
No issues found
Ln: 19
Ch: 1
SPC
CRLF
Developer PowerShell
Developer PowerShell
PS D:\VSO>
C# Interactive (.NET Core)
Output
Developer PowerShell
Error List
Solution Explorer
Search Solution Explorer (Ctrl+S)
Solution 'WebApp' (1 of 1 project)
WebApp
Connected Services
Dependencies
Properties
wwwroot
Components
Layout
Pages
Counter.razor
Error.razor
Home.razor
Weather.razor
_Imports.razor
App.razor
Routes.razor
appsettings.json
Program.cs
Solution Explorer
Git Changes
Class View
Properties
WebApp General
File Name
WebApp.csproj
Notifications
Diagnostic Tools
Ready
Add to Source Control
Select Repository


File Edit View Git Project Build Debug Test Analyze Tools Extensions Window Help
Search
WebApp
Debug
Any CPU
WebApp
https
GitHub Copilot
PREVIEW
UnitTest1.cs
Counter.razor
PlaywrightTests
PlaywrightTests.Tests
Test1()
namespace PlaywrightTests;
0 references
public class Tests
{
[SetUp]
0 references
public void Setup()
{
}
[Test]
0 references
public void Test1()
{
Assert.Pass();
}
}
146 %
0
1
Ln: 15
Ch: 2
SPC
CRLF
Developer PowerShell
Developer PowerShell
PS D:\VSO\WebApp\WebApp>
Solution Explorer
Search Solution Explorer (Ctrl+$)
Solution 'WebApp' (2 of 2 projects)
PlaywrightTests
Dependencies
GlobalUsings.cs
UnitTest1.cs
WebApp
Connected Services
Dependencies
Properties
wwwroot
Components
Layout
Pages
Counter.razor
Error.razor
Home.razor
Weather.razor
_Imports.razor
App.razor
Routes.razor
appsettings.json
Program.cs
Solution Explorer
Git Changes
Class View
Properties
C# Interactive (.NET Core)
Output
Developer PowerShell
Error List
Ready
Add to Source Control
Select Repository
Test Explorer
Notifications

1. Ajout d’un **projet de test**

   dotnet new nunit -n PlaywrightTests -o Test

2. Ajout du **Nuget Microsoft.Playwright**.xxx

   dotnet add package Microsoft.PlayWright.NUnit

3. Compiler ce projet

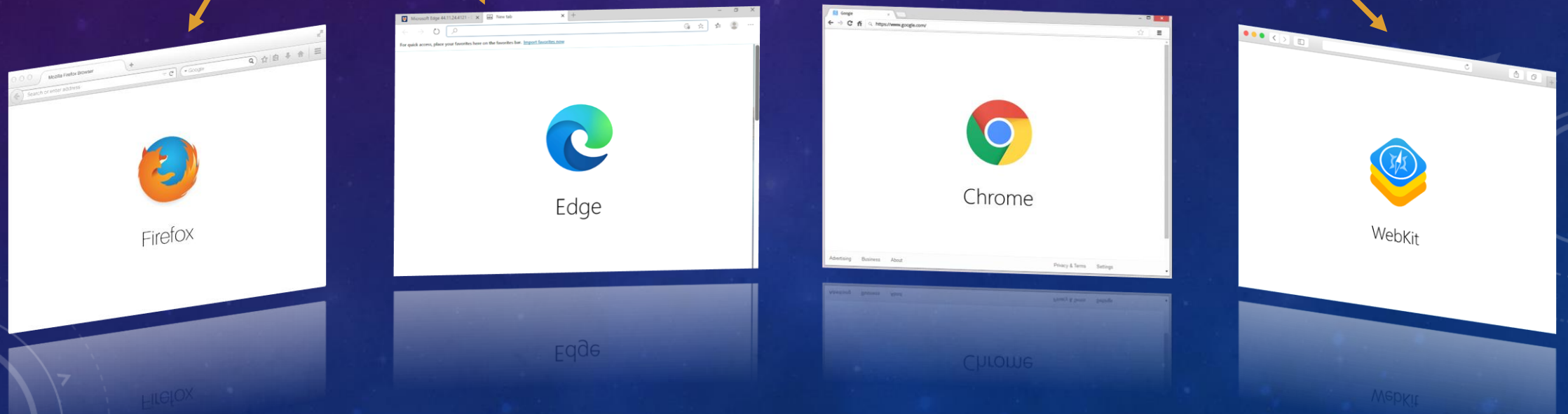
4. čîŋ řľǎỳxsîĝḥƫ řș, îŋșƫǎĺľ

5. čîŋ řľǎỳxsîĝḥƫ řș, çộđêĝêŋ

RÉSUMONS

Chrome Devtools Protocol

Web InspectorProtocol



MULTI-LANGUAGE

LOCATORS

http://localhost:3000

Sign in

```
<button>Sign in</button>
```

```
await page.GetByRole(AriaRole.Button,
                     new() { Name = "Sign in" })
          .ClickAsync();
```

LOCATORS

Quick Guide

These are the recommended built in locators.

- Page.GetByRole() to locate by explicit and implicit accessibility attributes.
- Page.GetByText() to locate by text content.
- Page.GetByLabel() to locate a form control by associated label's text.
- Page.GetByPlaceholder() to locate an input by placeholder.
- Page.GetByAltText() to locate an element, usually image, by its text alternative.
- Page.GetByTitle() to locate an element by its title attribute.
- Page.GetByTestId() to locate an element based on its `data-testid` attribute (other attributes can be configured).

```
await page.GetByLabel("User Name").FillAsync("John");

await page.GetByLabel("Password").FillAsync("secret-password");

await page.GetByRole(AriaRole.Button, new() { Name = "Sign in" }).ClickAsync();

await Expect(Page.GetByText("Welcome, John!")).ToBeVisibleAsync();
```

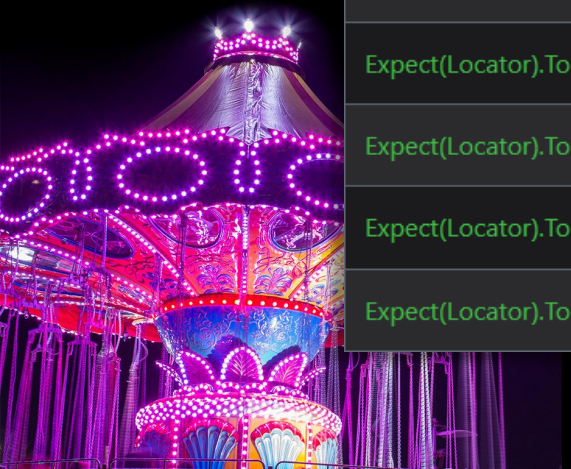
ACTIONS

```
// Text input
await page.GetByRole(AriaRole.Textbox).FillAsync("Peter");

// Check the checkbox
await page.GetByLabel("I agree to the terms above").CheckAsync();

// Assert the checked state
Assert.True(await page.GetByLabel("Subscribe to newsletter").IsCheckedAsync());

// Generic click
await page.GetByRole(AriaRole.Button).ClickAsync();

// Double click
await page.GetByText("Item").DblClickAsync();

// Press keys one by one
await page.Locator("#area").TypeAsync("Hello World!");

// Hit Enter
await page.GetByText("Submit").PressAsync("Enter");

// Select multiple files
await page.GetByLabel("Upload files").SetInputFilesAsync(new[] { "file1.txt", "file12.txt" });
```

ASSERTIONS

Assertion	Description
Expect(Locator).ToHaveAccessibleDescriptionAsync()	Element has a matching
Expect(Locator).ToHaveAccessibleNameAsync()	Element has a matching
Expect(Locator).ToHaveAttributeAsync()	Element has a DOM attr
Expect(Locator).ToHaveClassAsync()	Element has a class prop
Expect(Locator).ToHaveCountAsync()	List has exact number of
Expect(Locator).ToHaveCSSAsync()	Element has CSS proper
Expect(Locator).ToHaveIdAsync()	Element has an ID
Expect(Locator).ToHaveJSPropertyAsync()	Element has a JavaScript
Expect(Locator).ToHaveRoleAsync()	Element has a specific A
Expect(Locator).ToHaveTextAsync()	Element matches text
Expect(Locator).ToHaveValueAsync()	Input has a value

Assertion	Description
Expect(Locator).ToBeAttachedAsync()	Element is attached
Expect(Locator).ToBeCheckedAsync()	Checkbox is checked
Expect(Locator).ToBeDisabledAsync()	Element is disabled
Expect(Locator).ToBeEditableAsync()	Element is editable
Expect(Locator).ToBeEmptyAsync()	Container is empty
Expect(Locator).ToBeEnabledAsync()	Element is enabled
Expect(Locator).ToBeFocusedAsync()	Element is focused
Expect(Locator).ToBeHiddenAsync()	Element is not visible
Expect(Locator).ToBeInViewportAsync()	Element intersects viewport
Expect(Locator).ToBeVisibleAsync()	Element is visible
Expect(Locator).ToContainTextAsync()	Element contains text



TO INFINITY AND BEYOND

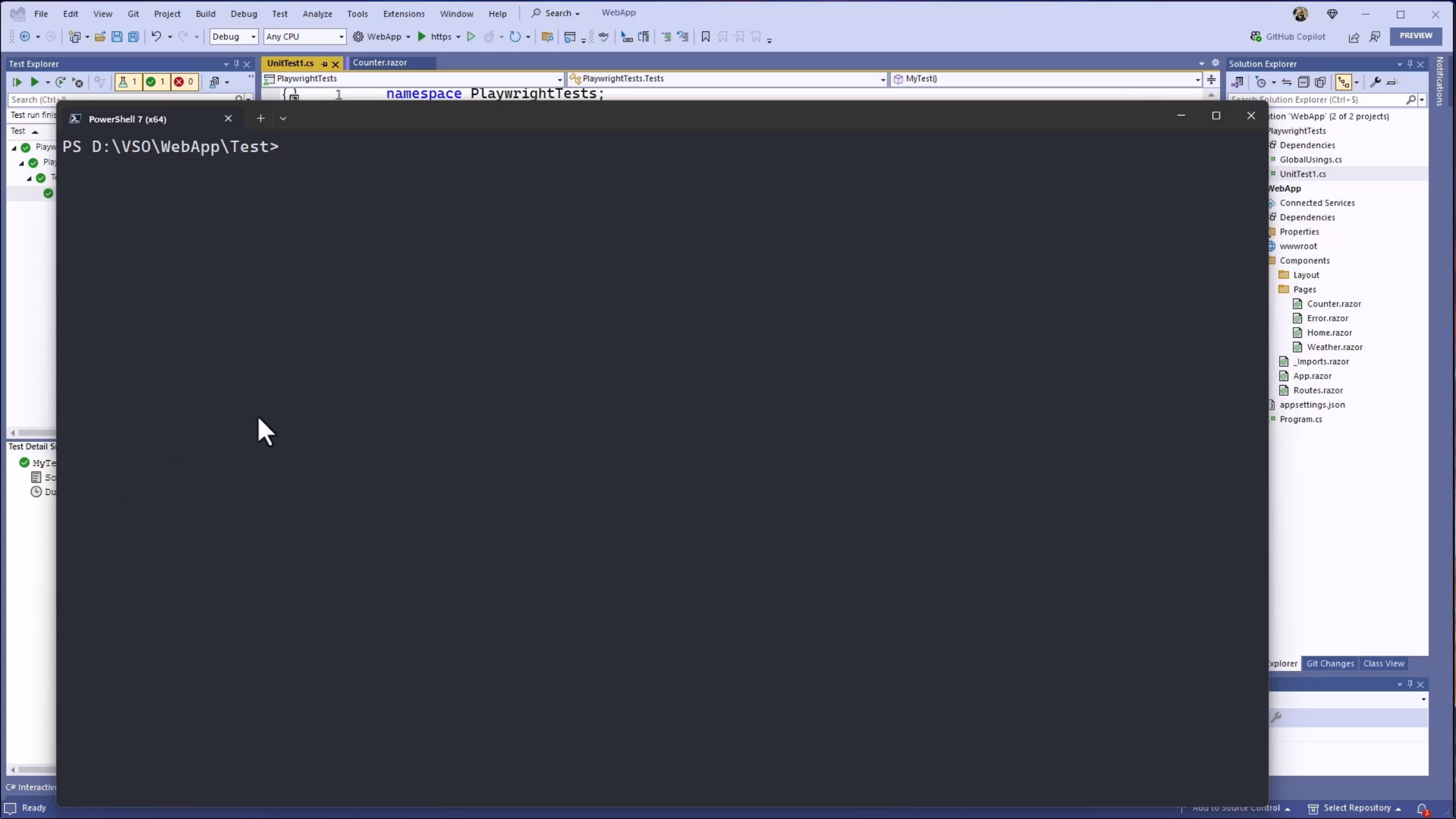
OTHER LOCATORS

- CSS Locator
- N-th element locator
- Parent element locator
- Combining two alternative locators
- Locating only visible elements
- Vue locator
- React locator
- XPath locatorLabel to form control retargeting
- Legacy text locator
- id, data-testid, data-test-id, data-test selectors
- Chaining selectors

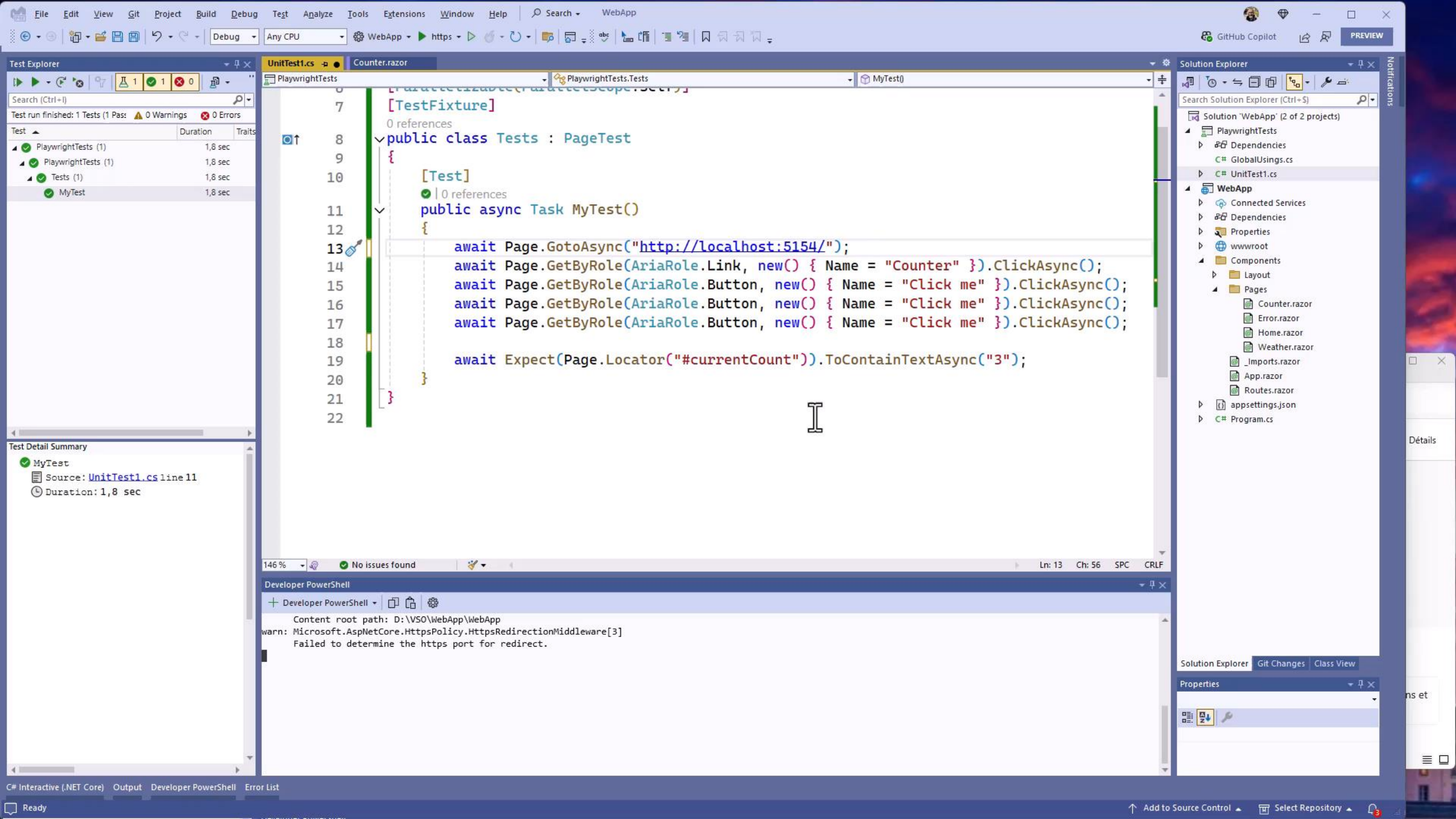
AUTHENTIFICATION

https://playwright.dev/dotnet/docs/auth

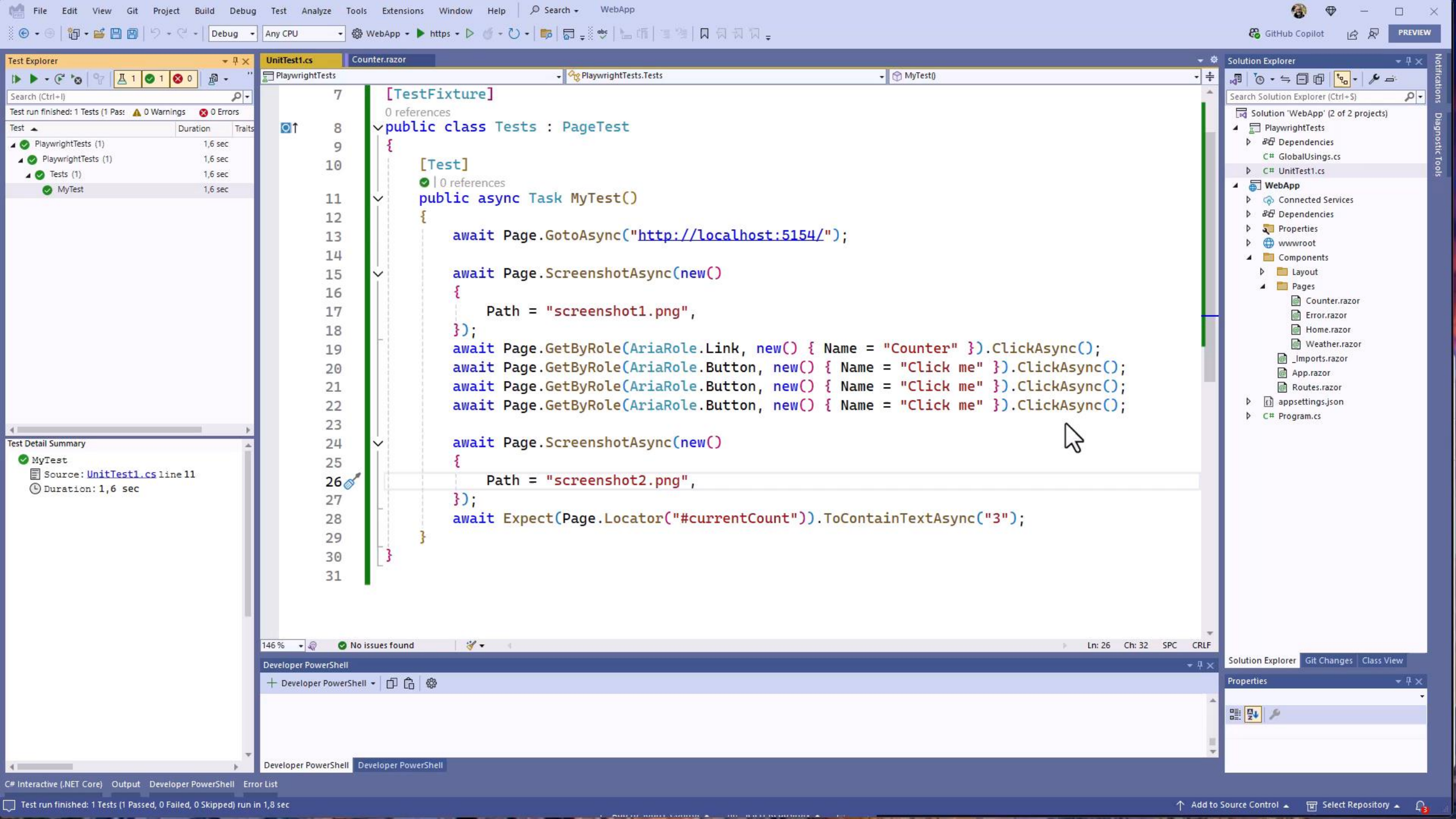
CODEGEN AND BEYOND


File Edit View Git Project Build Debug Test Analyze Tools Extensions Window Help
Search
WebApp
Debug
Any CPU
WebApp
https
GitHub Copilot
PREVIEW
Test Explorer
UnitTest1.cs
Counter.razor
PlaywrightTests
PlaywrightTests.Tests
MyTest()
namespace PlaywrightTests;
PowerShell 7 (x64)
PS D:\VSO\WebApp\Test>
Solution Explorer
Search Solution Explorer (Ctrl+$)
PlaywrightTests
Dependencies
GlobalUsings.cs
UnitTest1.cs
WebApp
Connected Services
Dependencies
Properties
wwwroot
Components
Layout
Pages
Counter.razor
Error.razor
Home.razor
Weather.razor
_Imports.razor
App.razor
Routes.razor
appsettings.json
Program.cs
Git Changes
Class View
Notifications
Ready
Select Repository

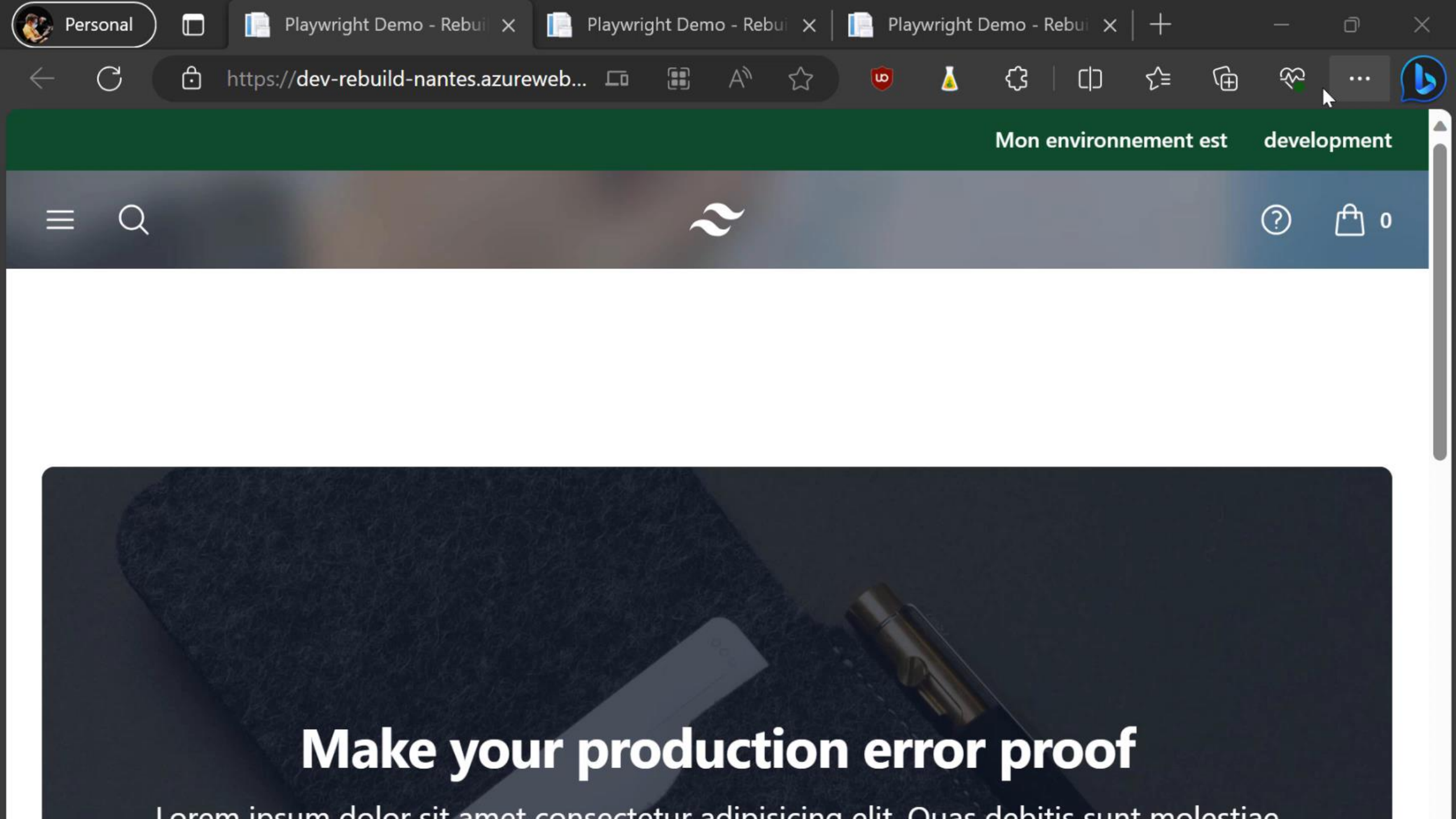
NOTRE PREMIER SELFIE ?

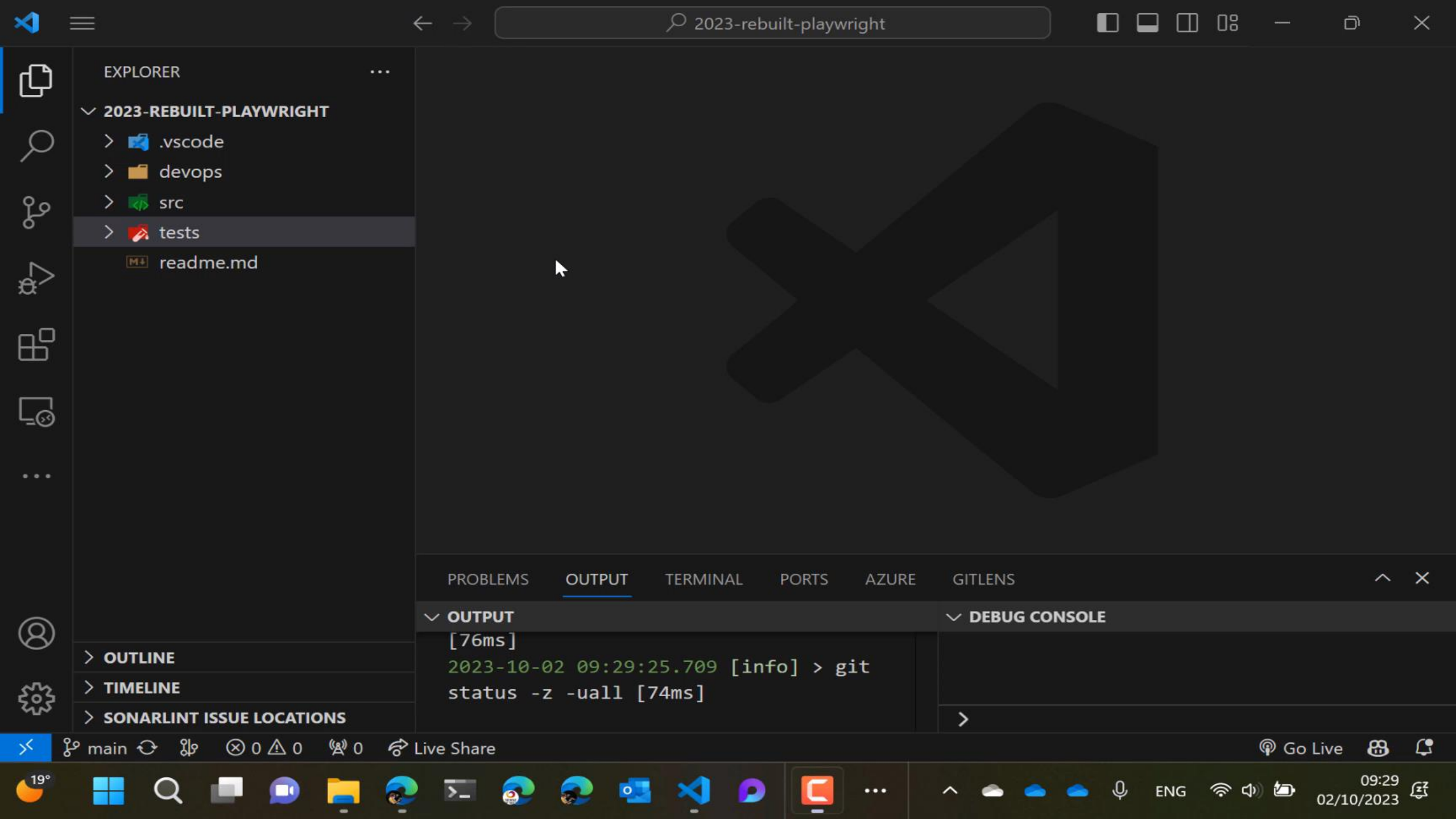

File Edit View Git Project Build Debug Test Analyze Tools Extensions Window Help
Search
WebApp
Debug
Any CPU
WebApp
https
GitHub Copilot
PREVIEW
Test Explorer
Search (Ctrl+I)
Test run finished: 1 Tests (1 Pass) 0 Warnings 0 Errors
Test
Duration
Traits
PlaywrightTests (1) 1,8 sec
PlaywrightTests (1) 1,8 sec
Tests (1) 1,8 sec
MyTest 1,8 sec
Test Detail Summary
MyTest
Source: UnitTest1.cs line 11
Duration: 1,8 sec
UnitTest1.cs
Counter.razor
PlaywrightTests
PlaywrightTests.Tests
MyTest()
[TestFixture]
0 references
public class Tests : PageTest
{
[Test]
0 references
public async Task MyTest()
{
await Page.GotoAsync("http://localhost:5154/");
await Page.GetByRole(AriaRole.Link, new() { Name = "Counter" }).ClickAsync();
await Page.GetByRole(AriaRole.Button, new() { Name = "Click me" }).ClickAsync();
await Page.GetByRole(AriaRole.Button, new() { Name = "Click me" }).ClickAsync();
await Page.GetByRole(AriaRole.Button, new() { Name = "Click me" }).ClickAsync();
await Expect(Page.Locator("#currentCount")).ToContainTextAsync("3");
}
}
146 %
No issues found
Ln: 13 Ch: 56 SPC CRLF
Developer PowerShell
Developer PowerShell
Content root path: D:\VSO\WebApp\WebApp
warn: Microsoft.AspNetCore.HttpsPolicy.HttpsRedirectionMiddleware[3]
Failed to determine the https port for redirect.
Solution Explorer
Search Solution Explorer (Ctrl+$)
Solution 'WebApp' (2 of 2 projects)
PlaywrightTests
Dependencies
GlobalUsings.cs
UnitTest1.cs
WebApp
Connected Services
Dependencies
Properties
wwwroot
Components
Layout
Pages
Counter.razor
Error.razor
Home.razor
Weather.razor
_Imports.razor
App.razor
Routes.razor
appsettings.json
Program.cs
Solution Explorer
Git Changes
Class View
Properties
Notifications
C# Interactive (.NET Core)
Output
Developer PowerShell
Error List
Ready
Add to Source Control
Select Repository

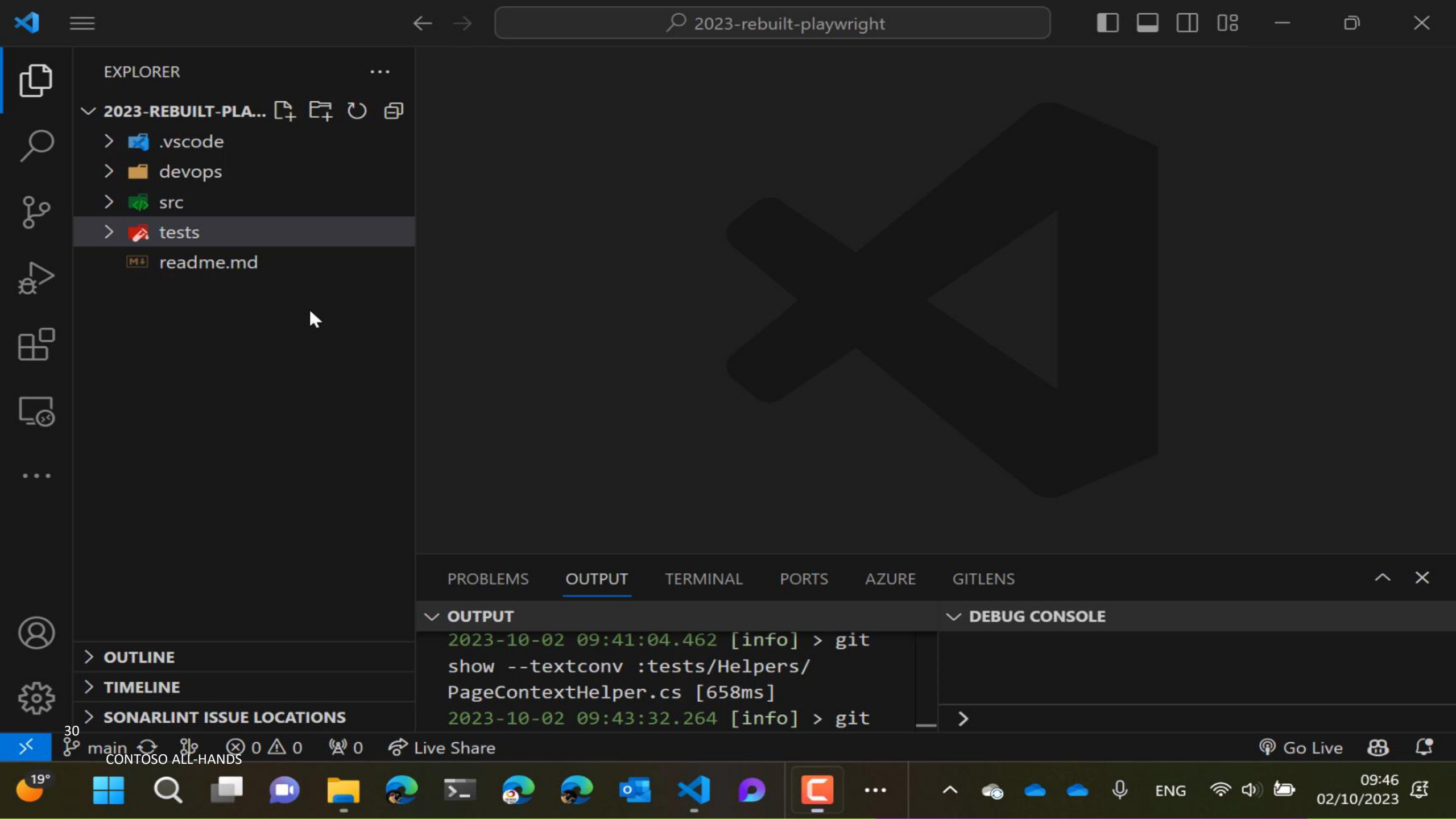
LE DEBUG

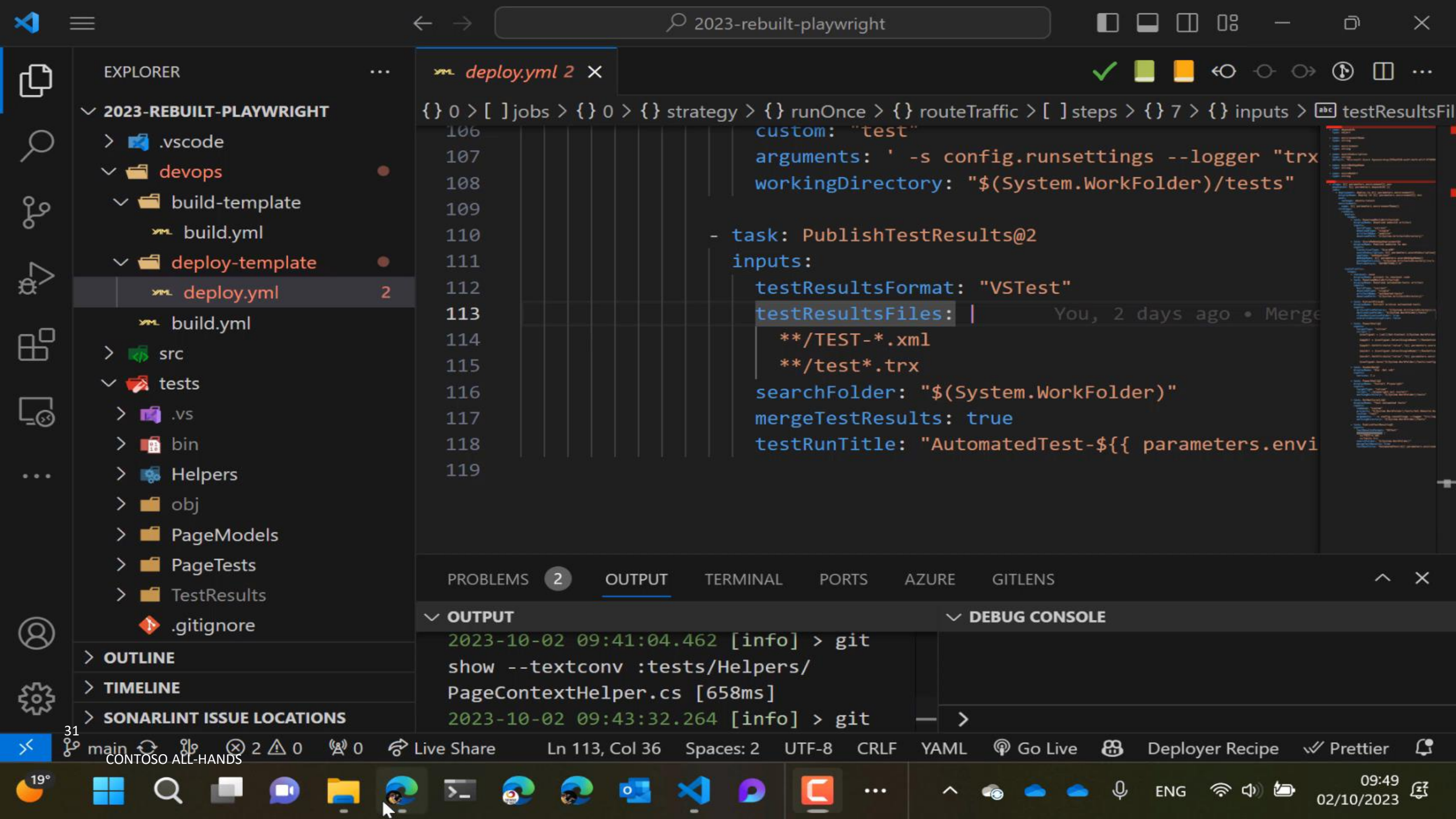

File Edit View Git Project Build Debug Test Analyze Tools Extensions Window Help
Search
WebApp
Debug
Any CPU
WebApp
https
GitHub Copilot
PREVIEW
Test Explorer
Search (Ctrl+I)
Test run finished: 1 Tests (1 Pass 0 Warnings 0 Errors
Test
Duration
Traits
PlaywrightTests (1) 1,6 sec
PlaywrightTests (1) 1,6 sec
Tests (1) 1,6 sec
MyTest 1,6 sec
Test Detail Summary
MyTest
Source: UnitTest1.cs line 11
Duration: 1,6 sec
UnitTest1.cs
Counter.razor
PlaywrightTests
PlaywrightTests.Tests
MyTest()
[TestFixture]
0 references
public class Tests : PageTest
{
[Test]
0 references
public async Task MyTest()
{
await Page.GotoAsync("http://localhost:5154/");
await Page.ScreenshotAsync(new()
{
Path = "screenshot1.png",
});
await Page.GetByRole(AriaRole.Link, new() { Name = "Counter" }).ClickAsync();
await Page.GetByRole(AriaRole.Button, new() { Name = "Click me" }).ClickAsync();
await Page.GetByRole(AriaRole.Button, new() { Name = "Click me" }).ClickAsync();
await Page.GetByRole(AriaRole.Button, new() { Name = "Click me" }).ClickAsync();
await Page.ScreenshotAsync(new()
{
Path = "screenshot2.png",
});
await Expect(Page.Locator("#currentCount")).ToContainTextAsync("3");
}
}
146 %
No issues found
Ln: 26 Ch: 32 SPC CRLF
Developer PowerShell
Developer PowerShell
Developer PowerShell
Developer PowerShell
Solution Explorer
Search Solution Explorer (Ctrl+S)
Solution 'WebApp' (2 of 2 projects)
PlaywrightTests
Dependencies
GlobalUsings.cs
UnitTest1.cs
WebApp
Connected Services
Dependencies
Properties
wwwroot
Components
Layout
Pages
Counter.razor
Error.razor
Home.razor
Weather.razor
_Imports.razor
App.razor
Routes.razor
appsettings.json
Program.cs
Solution Explorer
Git Changes
Class View
Properties
Notifications
Diagnostic Tools
C# Interactive (.NET Core)
Output
Developer PowerShell
Error List
Test run finished: 1 Tests (1 Passed, 0 Failed, 0 Skipped) run in 1,8 sec
Add to Source Control
Select Repository

INDUSTRIALISATION


Personal
Playwright Demo - Rebui
Playwright Demo - Rebui
Playwright Demo - Rebui
https://dev-rebuild-nantes.azureweb...
Mon environnement est development
0
Make your production error proof
Lorem ipsum dolor sit amet consectetur adipisicing elit. Quas debitis sunt molestiae


2023-rebuilt-playwright
EXPLORER
2023-REBUILT-PLAYWRIGHT
.vscode
devops
src
tests
readme.md
OUTLINE
TIMELINE
SONARLINT ISSUE LOCATIONS
PROBLEMS
OUTPUT
TERMINAL
PORTS
AZURE
GITLENS
OUTPUT
[76ms]
2023-10-02 09:29:25.709 [info] > git status -z -uall [74ms]
DEBUG CONSOLE
main
0 0
0
Live Share
Go Live
19°
ENG
09:29
02/10/2023


2023-rebuilt-playwright
EXPLORER
2023-REBUILT-PLA...
.vscode
devops
src
tests
readme.md
OUTLINE
TIMELINE
SONARLINT ISSUE LOCATIONS
PROBLEMS
OUTPUT
TERMINAL
PORTS
AZURE
GITLENS
OUTPUT
2023-10-02 09:41:04.462 [info] > git show --textconv :tests/Helpers/PageContextHelper.cs [658ms]
2023-10-02 09:43:32.264 [info] > git
DEBUG CONSOLE
main
0 0
0
Live Share
Go Live
19°
ENG
09:46
02/10/2023


2023-rebuilt-playwright
EXPLORER
2023-REBUILT-PLAYWRIGHT
.vscode
devops
build-template
build.yml
deploy-template
deploy.yml 2
build.yml
src
tests
.vs
bin
Helpers
obj
PageModels
PageTests
TestResults
.gitignore
OUTLINE
TIMELINE
SONARLINT ISSUE LOCATIONS
deploy.yml 2
{} 0 > [ ] jobs > {} 0 > {} strategy > {} runOnce > {} routeTraffic > [ ] steps > {} 7 > {} inputs > testResultsFil
106 custom: "test"
107 arguments: ' -s config.runsettings --logger "trx
108 workingDirectory: "$(System.WorkFolder)/tests"
109
110 - task: PublishTestResults@2
111 inputs:
112 testResultsFormat: "VSTest"
113 testResultsFiles: |
You, 2 days ago • Merge
114 **/TEST-*.xml
115 **/test*.trx
116 searchFolder: "$(System.WorkFolder)"
117 mergeTestResults: true
118 testRunTitle: "AutomatedTest-${{ parameters.envi
119
PROBLEMS 2
OUTPUT
TERMINAL
PORTS
AZURE
GITLENS
OUTPUT
2023-10-02 09:41:04.462 [info] > git show --textconv :tests/Helpers/PageContextHelper.cs [658ms]
2023-10-02 09:43:32.264 [info] > git
DEBUG CONSOLE
main
2 0
0
Live Share
Ln 113, Col 36
Spaces: 2
UTF-8
CRLF
YAML
Go Live
Deployer Recipe
Prettier
19°
ENG
09:49
02/10/2023

Personal

Pipelines - Run 20231002.1

https://dev.azure.com/tartine-et-tech/rebuild-20...

Azure DevOps / Pipelines / senseoftech.2023-rebuilt-pl... / 202310

Search

Loadin profile menu items.

#20231002.1 • Merge branch 'main' of https://github.com/senseoftech/2023-rebuilt...

senseoftech.2023-rebuilt-playwright

This run is being retained as one of recent runs by pipeline.

View retention leases

Summary

Triggered by AClerbois

Repository and version
senseoftech/2023-rebuilt-playwright
main e8fa4449

Time started and elapsed
Today at 09:25
9m 19s

Related
0 work items
0 artifacts

Tests and coverage
Get started

https://dev.azure.com/tartine-et-tech/rebuild-2023-nan...

19°

ENG

09:49
02/10/2023

Personal

Pipelines - Run 20231002.1

https://dev.azure.com/tartine-et-tec...

Downloads

trace (2).zip
Open file

See more

rebuild-2023-nantes / Pipelines / senseoftech.2023-rebu

Summary Tests Environments Associated pipelines

Flow_Home_ToPage1_ToPlanning

Result Details

Passed 17m ago on fv-az497-938

Duration 0:00:04.333

Owner not available

Date started 2/10/2023, 09:34:25

Date completed 2/10/2023, 09:34:29

Debug Work items Attachments History

227K Added 17m ago
20231002-073428-1186.png

171K Added 17m ago
20231002-073428-80273.p...

659K Added 17m ago
trace.zip

3724K Added 17m ago

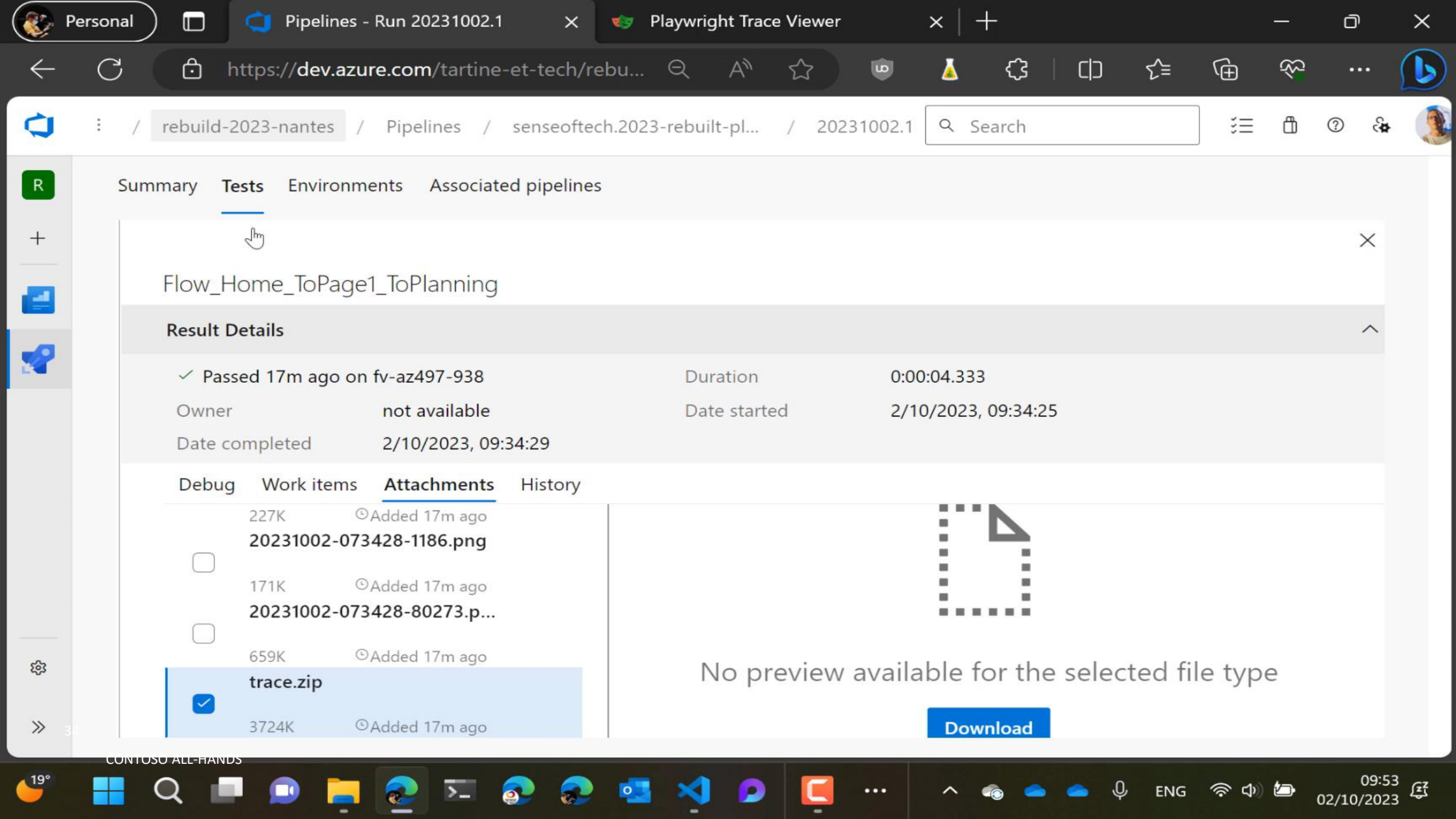
No preview available for the selected file type

Download

19°

ENG

09:52
02/10/2023


Personal
Pipelines - Run 20231002.1
Playwright Trace Viewer
https://dev.azure.com/tartine-et-tech/rebu...
rebuild-2023-nantes / Pipelines / senseoftech.2023-rebuilt-pl... / 20231002.1
Search
Summary
Tests
Environments
Associated pipelines
Flow_Home_ToPage1_ToPlanning
Result Details
Passed 17m ago on fv-az497-938
Duration 0:00:04.333
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659K Added 17m ago
trace.zip
3724K Added 17m ago
No preview available for the selected file type
Download
CONTOSO ALL-HANDS
ENG
09:53
02/10/2023

- Trace
- Screenshots
- Videos

GET FEEDBACKS

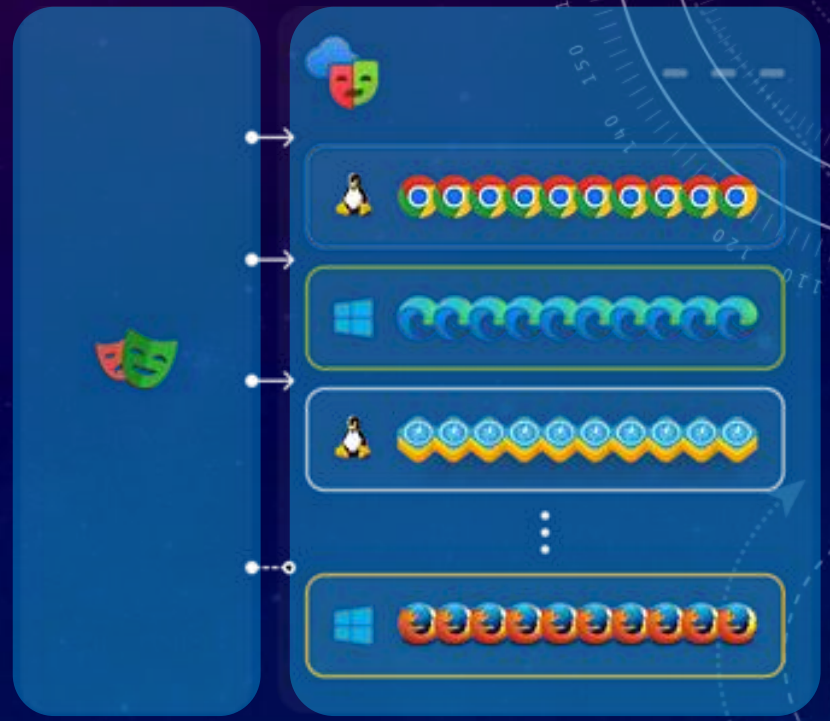
AZURE PLAYWRIGHT TESTING SERVICE

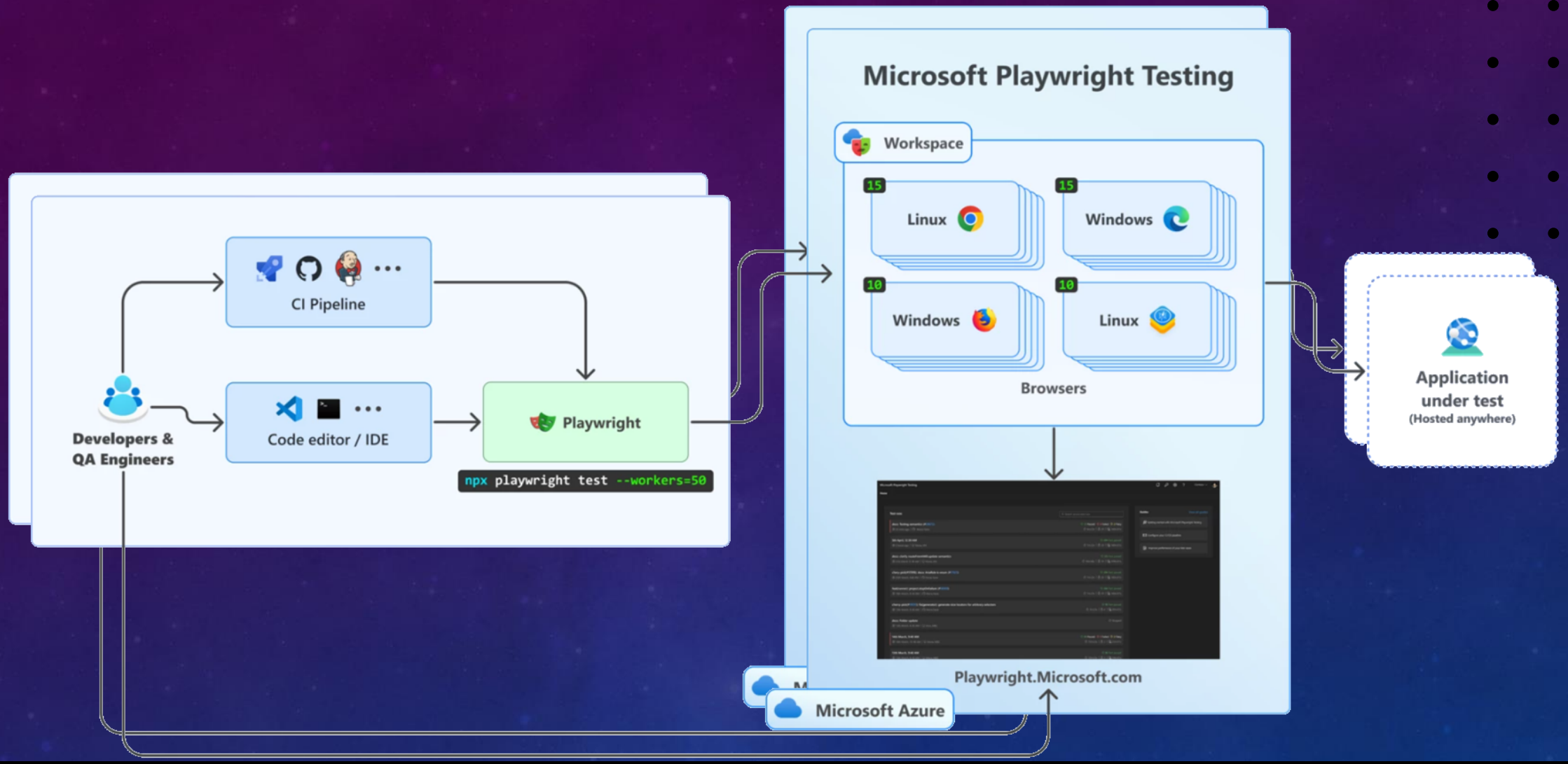
Exécuter des tests Playwright depuis Azure avec différentes combinaisons de navigateurs et d’OS

RUN PLAYWRIGHT TESTS AT SCALE

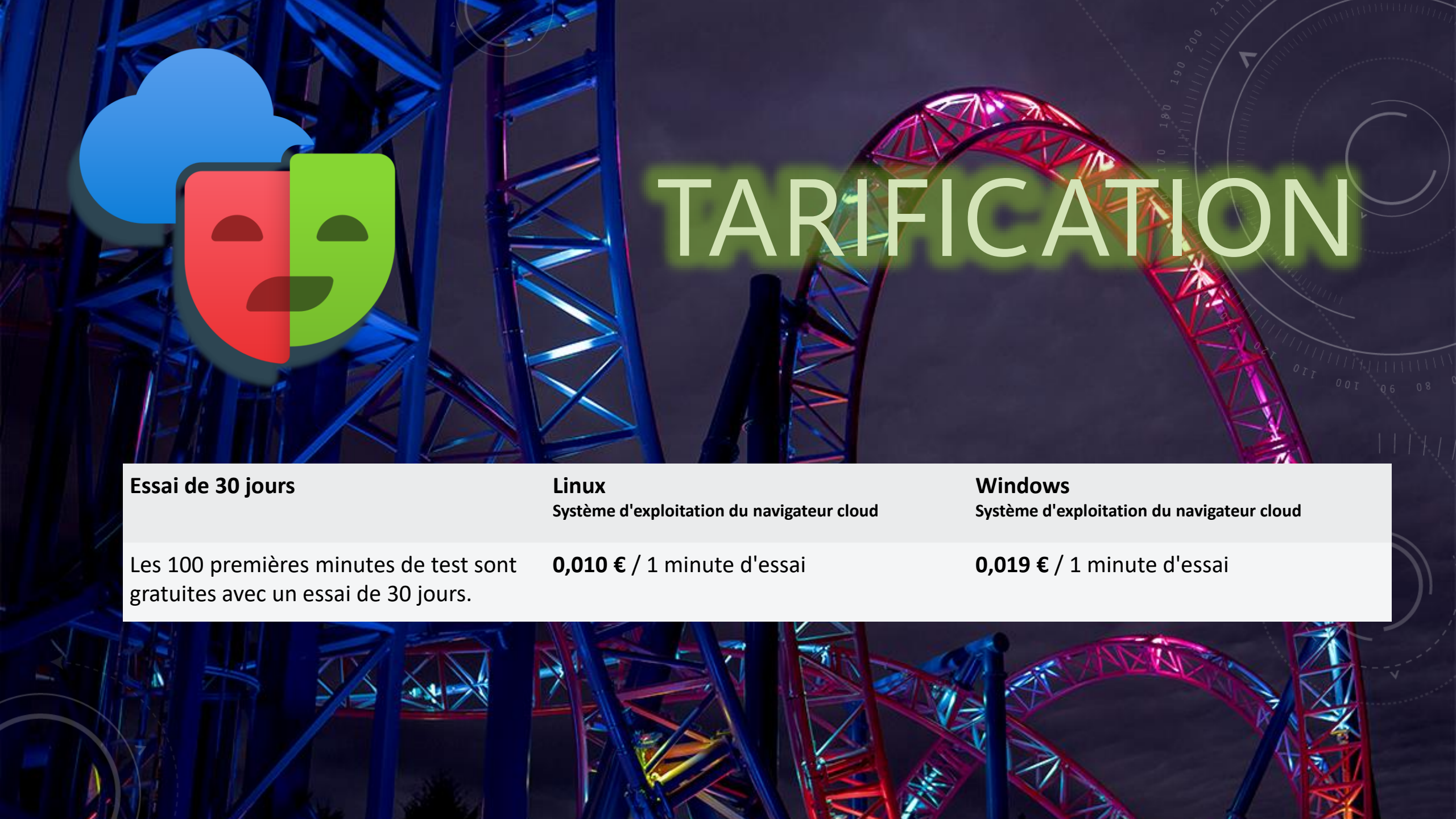
Exécuter les suites de tests plus rapidement

Distribuer les tests sur les navigateurs avec une **parallélisation** plus élevée dans CI pour exécuter les suites de tests plus rapidement.





AZURE PLAYWRIGHT TESTING SERVICE



TARIFICATION

Essai de 30 jours	**Linux** **Système d'exploitation du navigateur cloud**	**Windows** **Système d'exploitation du navigateur cloud**
Les 100 premières minutes de test sont gratuites avec un essai de 30 jours.	**0,010 €** / 1 minute d'essai	**0,019 €** / 1 minute d'essai

GOOD PRACTISES

```cs
using System.Threading.Tasks;
using Microsoft.Playwright;

namespace BigEcommerceApp.Tests.Models;

public class SearchPage
{
  private readonly IPage _page;
  private readonly ILocator _searchTermInput;

  public SearchPage(IPage page)
  {
    _page = page;
    _searchTermInput = page.Locator("[aria-label='Enter your search term']");
  }

  public async Task GotoAsync()
  {
    await _page.GotoAsync("https://bing.com");
  }

  public async Task SearchAsync(string text)
  {
    await _searchTermInput.FillAsync(text);
    await _searchTermInput.PressAsync("Enter");
  }
}
```

```cs
using BigEcommerceApp.Tests.Models;

// in the test
var page = new SearchPage(await browser.NewPageAsync());
await page.GotoAsync();
await page.SearchAsync("search query");
```

Trip & Tricks - Page object models

RELIABLE END-TO-END TESTING FOR MODERN WEB APPS

- 🌐 Any browser – Any platform – One API
- 🟦 Full Isolation – Fast execution
- 🎉 Powerful Tooling – Multi Language

MERCI 💜