

Testare un'app Blazor

Introduzione a bUnit

Quale è il nostro contesto?

Dobbiamo implementare (o abbiamo già implementato) una applicazione in Blazor e dobbiamo avere una suite di test automatici il più completa possibile



Who you gonna call?

bUnit, chi era costui?

bUnit is a testing library for Blazor Components. Its goal is to make it easy to write comprehensive, stable unit tests. With bUnit, you can:

- Setup and define components under tests using C# or Razor syntax
- Verify outcomes using semantic HTML comparer
- Interact with and inspect components as well as trigger event handlers
- Pass parameters, cascading values and inject services into components under test
- Mock IJSRuntime, Blazor authentication and authorization, and others

<https://bunit.dev>

Prima di partire...

```
dotnet new xunit -n <NomeProgettoDiTest>
```

```
dotnet add package bunit
```

```
<Project Sdk="Microsoft.NET.Sdk.Razor">
```

```
  <PropertyGroup>
```

```
    <TargetFramework>net6.0</TargetFramework>
```

```
  </PropertyGroup>
```

```
  ...
```

```
</Project>
```

Test in C#

```
[Fact]
public void MyComponent_Should_Render_Correctly()
{
    using var ctx = new TestContext();

    var component = ctx.RenderComponent<MyComponent>(parameters =>
    {
        parameters.Add(c => c.Name, "MyComponent");
    });

    component.MarkupMatches("<div><h1>Hello MyComponent</h1></div>");
}
```

Test in razor

```
@inherits TestContext;
```

```
@code {  
    [Fact]  
    public void MyComponent_Should_Render_Correctly()  
    {  
        using var ctx = new TestContext();  
  
        var component = ctx.Render(@<MyComponent Name="MyComponent" />);  
        component.MarkupMatches(@<div><h1>Hello MyComponent</h1></div>);  
    }  
}
```

Facciamo parlare il codice...

<https://github.com/albx/testing-blazor>

bUnit...what else?!

Testare il trigger dei custom events:

<https://bunit.dev/docs/interaction/trigger-event-handlers.html#triggering-custom-events>

Mocking della classe HttpClient:

<https://bunit.dev/docs/test-doubles/mocking-httpclient.html>

Mocking della classe PersistentComponentState:

<https://bunit.dev/docs/test-doubles/faking-persistentcomponentstate.html>

Link utili

- <https://bunit.dev/docs/getting-started/index.html>
- <https://blazordev.it/articoli/testing-dei-componenti-blazor-con-bunit/>
- <https://www.youtube.com/watch?v=FAEJhXcWvQU>
- <https://www.ugidotnet.org/articoli/2639/Testare-componenti-Blazor-utilizzando-bUnit>

Grazie!



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