BLAZOR

Create a new Blazor app

.NET 5.0

Blazor Server App
A project template for creating a Blazor server app that runs server-side inside an ASP.NET Core app and handles user interactions over a SignalR connection. This template can be used for web apps with rich dynamic user interfaces (UIs).

Blazor WebAssembly App
A project template for creating a Blazor app that runs on WebAssembly. This template can be used for web apps with rich dynamic user interfaces (UIs).

GITHUB
REPO

DEMO

https://github.com/dneimke/BlazorGame

Overview

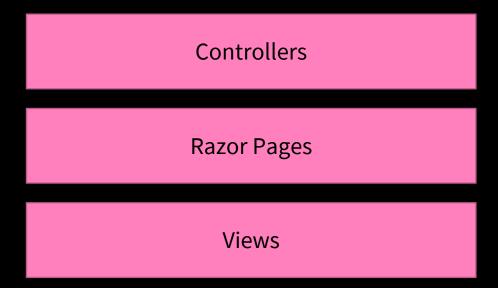**WHAT IS BLAZOR?**

BLAZOR FORMS

JS INTEROP

WRAP UP

ASP.NET Core Refresher

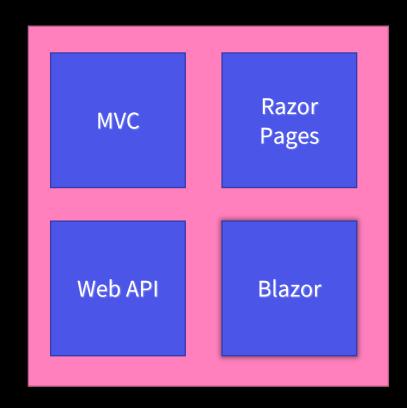**Shared Services**
- Hosting - CreateHostBuilder
- Middleware
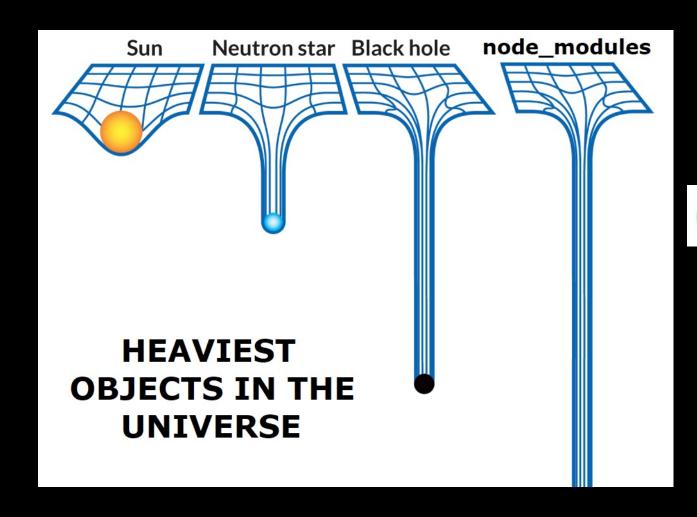- Dependency Injection
- Routing
- Configuration
- Razor page compilation

Controllers

Razor Pages

Views

ASP.NET Core Project Types

Blazor Server App	blazorserver	[C#]	Web/Blazor
Blazor WebAssembly App	blazorwasm	[C#]	Web/Blazor/WebAssembly
ASP.NET Core Web App (Model-View-Controller)	mvc	[C#], F#	Web/MVC
ASP.NET Core Web App	webapp, razor	[C#]	Web/MVC/Razor Pages
ASP.NET Core Web API	webapi	[C#], F#	Web/WebAPI

A typical SPA application…

Sun   Neutron star   Black hole   **node_modules**

HEAVIEST OBJECTS IN THE UNIVERSE
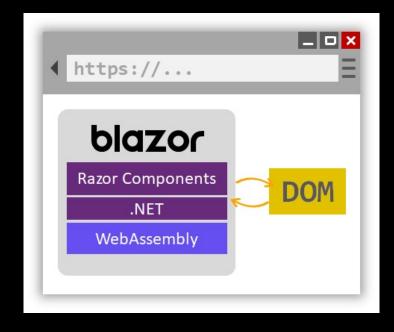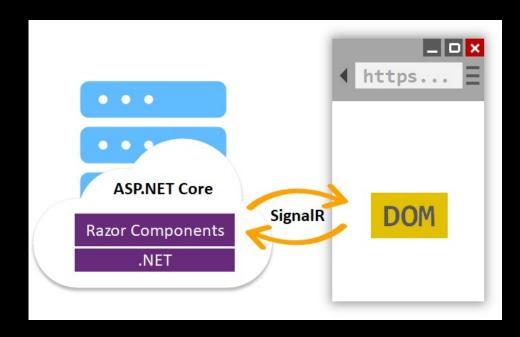
Zach Leatherman @zachleat · Feb 26
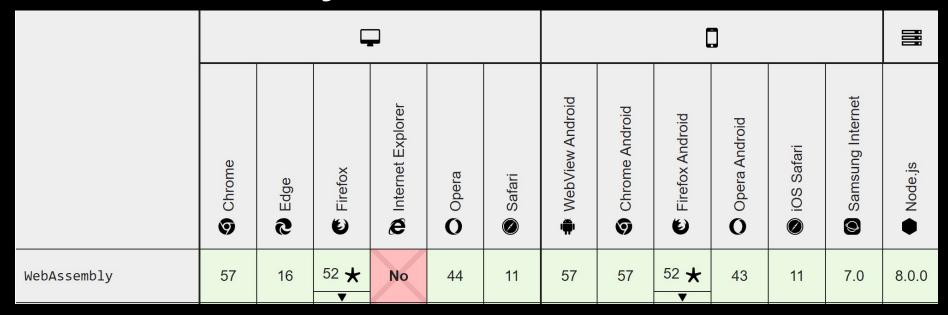the javascript bundles will continue loading until morale improves

What's Blazor?

Blazor WebAssembly

Blazor Server

WebAssembly (WASM)

	Desktop						Mobile						Server
	Chrome	Edge	Firefox	Internet Explorer	Opera	Safari	WebView Android	Chrome Android	Firefox Android	Opera Android	iOS Safari	Samsung Internet	Node.js
WebAssembly	57	16	52 ★	No	44	11	57	57	52 ★	43	11	7.0	8.0.0

W3C

World Wide Web Consortium (W3C) brings a new language to the Web as WebAssembly becomes a W3C Recommendation

Following HTML, CSS and JavaScript, WebAssembly becomes the fourth language for the Web which allows code to run in the browser
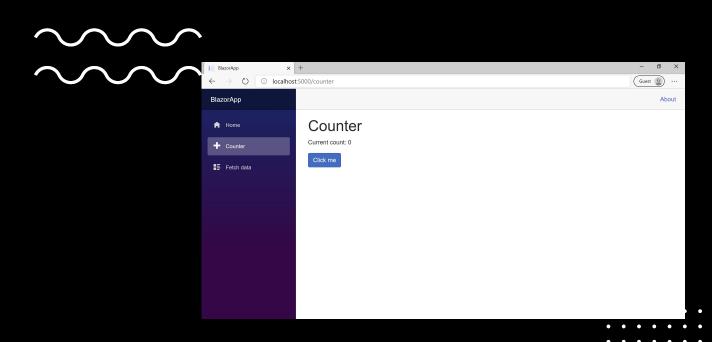
Ref - https://www.w3.org/2019/12/pressrelease-wasm-rec.html

Productivity

Do this ...   Not this   … or this will happen

DEMO

BLAZOR PROJECT TYPES

https://github.com/sahan91/BlazorTalk-ADNUG/tree/main/Demo-1-SimpleCounter

Recap

- C# and .NET Framework
- Single auth model
- 1 Framework
- 1 build system and package manager
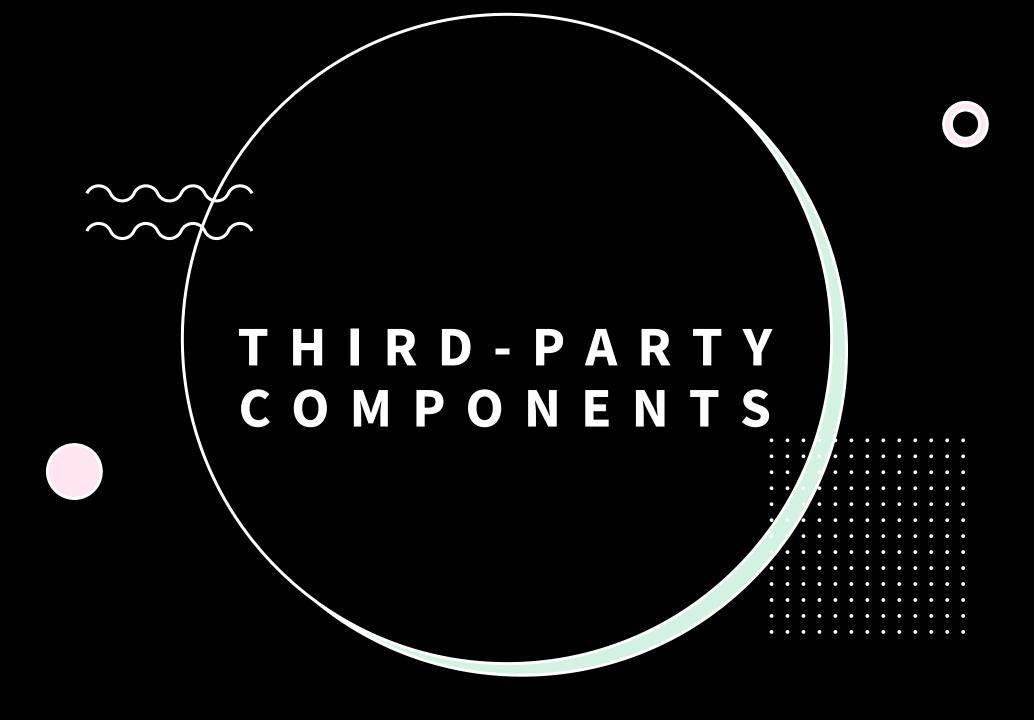- Shared code – e.g. Types, HttpClient, IOptions
- xUnit tests

THIRD-PARTY COMPONENTS

What's out there

Authentication

- BlazorBoilerplate - `stars 1.3k` `last commit march` Real World Admin Dashboard / Starter kit with IdentityServer4 Material Design. Demo.
- BlazorWithIdentity - `stars 247` `last commit march` A sample project showcasing a Blazor app using EF Core with Identity authentication.
- Authentication with client-side Blazor - `stars 149` `last commit january 2020` Authentication with client-side Blazor using WebAPI and ASP.NET Core Identity. Blog post.
- TheIdServer - `stars 194` `last commit yesterday` OpenID/Connect server base on IdentityServer4.
- Blazor and Identity Server - `stars 77` `last commit july 2020` This project demonstrates how to secure a Blazor WebAssembly application with a standalone Identity Server instance and use it to acquire a token for a protected API.
- BlazorAuthenticationSample - `stars 62` `last commit june 2020` A sample showing some of the ASP.NET Core Blazor authentication features (also some testing...).
- Blazor-WASM-Identity-gRPC - `stars 63` `last commit february` Blazor WASM, IdentityServer4 & gRPC with roles authorization.
- BlazorGraphApi - `stars 25` `last commit october 2020` Blazor Server App with AD Authentication, that calls the MS Graph API on-behalf of the signed-in user using Microsoft.Identity.Web.
- Blorc.OpenIdConnect - `last commit yesterday` The right way to use OpenID Connect on Blazor.
- Blazor-WASM-AzureAD-gRPC - `last commit november 2020` Blazor WASM, Azure AD, REST & gRPC.
- Blazor-WASM-Auth0-gRPC - `last commit july 2020` Blazor WASM, Auth0, REST & gRPC.
- Blazor WebAssembly and Azure Active Directory - `last commit november 2020` Blazor WebAssembly application secured with Azure Active Directory. This source code is related to an article on Medium: Securing a Blazor WebAssembly application with Azure Active Directory.
- Blazor Authentication Extension for Azure Static Web Apps - `last commit july 2020` Blazor Authentication Extension for Azure Static Web Apps.
- Quiz manager secured by Auth0 - `last commit july 2020` This repository contains a Blazor WebAssembly application implementing a simple Quiz manager secured by Auth0. The implementation details are described in the following article: Securing Blazor WebAssembly Apps.
- Blazor-WASM-Identity-gRPC-Alexa - `last commit january` Blazor WASM, IdentityServer4 , gRPC with roles authorization & Alexa Skill Backend.

Cloud

- BlazorFile2Azure - `stars 19` `last commit april 2020` Upload a file from Blazor WebAssembly to Azure Blob Storage.
- Blazor WASM Deployment - `last commit august 2020` Sample repo for showing Actions to deploy a Blazor app to Azure services.
- BlazorJobBoard - `stars 44` `last commit july 2020` Blazor WebAssembly based jobboard application deployed to Azure Storage Static Site. Demo.
- EventGrid Viewer Blazor - `stars 12` `last commit july 2020` Blazor Server app that displays EventGrid messages in realtime & allows the ability to secure the app using Azure AD, KeyVault & Managed Identities.

CMS

- Blogifier - `stars 799` `last commit last friday` ASP.NET Core Blogging application with Blazor Admin Dashboard. Demo.
- eShopOnBlazor - `stars 208` `last commit december 2020` Migration of a traditional ASP.NET Web Forms app to Blazor.
- RapidCMS - `stars 150` `last commit march` A code-first, extensible Blazor app that generates a CMS for your own database.
- JHipster.NET - `stars 145` `last commit today` JHipster is a well-known platform for generating modern application in java world. JHipster provides a blueprints system that allows to override the default behavior of the generator. JHipster.NET is a blueprint that overrides the back-end part, originally generated in spring boot, by back-end in asp.net core. For the front-end all the common language can be used (angular, react), including Blazor.
- BlazorForum - `stars 60` `last commit november 2020` Forum application built with Blazor.
- BlazorShop - `stars 112` `last commit november 2020` Simple shop application built with Blazor WebAssembly.
- Atlas - `stars 90` `last commit march` A forum software built with ASP.NET Core Blazor WebAssembly.
- Gitter - `stars 36` `last commit june 2020` A Blazor Gitter client.
- AcBlog - `stars 42` `last commit november 2020` A blogging PWA that can be hosted as a full static website or as a server-prerender dynamic website. GitHub Pages Demo.
- BlazingOrchard - `stars 48` `last commit november 2020` Blazing Orchard is a modular application framework that turns your Blazor project into a CMS-powered Blazor application by leveraging Orchard Core as a decoupled backend/CMS server using its REST & GraphQL APIs.
- BlazorGhost - `last commit september 2020` A Blazor frontend for Ghost blogs.
- BlazorWPBlog - `last commit november 2020` Wordpress blog with Blazor.

IoT

- PresenceLight - `stars 274` `last commit last tuesday` PresenceLight is a solution to broadcast your various statuses to a Phillips Hue or LIFX light bulb. Some statuses you can broadcast are: your availability in Microsoft Teams, your current Windows 10 theme, and a theme or color of your choosing. Blog post. Demo video.

Logging

- Logging.Samples - `last commit november 2020` Samples for .NET Core and ASP.NET Core logging using various logger frameworks.

Machine Learning

- Scalable sentiment analysis - `stars 3.1k` `last commit last tuesday` A sample ables to make sentiment analysis prediction/detection of what the user is writing in a very UI interactive app (Blazor based) in the client side and running an ML.NET model (Sentiment analysis based on binary-classification) in the server side.
- optimizer.ml - `stars 36` `last commit july 2020` A "server-less" general purpose optimization suite for algorithm parameters. Also provides offline optimization of Quantconnect Lean trading algorithms. Demo (https://optimizer.ml).
- Baseball Machine Learning Workbench - `stars 22` `last commit march` A web application that showcases performing what-if analysis using in-memory Machine Learning models. Live demo.
- PropertyPrices - `last commit april 2020` A blazor front-end site that provides analysis and ensemble learning predictions (through SharpLearning) of property prices in the UK. Demo (https://propertyprices.org.uk).
- BlazorML5 - `last commit december 2020` ML5 Machine Learning for Blazor with JSInterop mechanism.
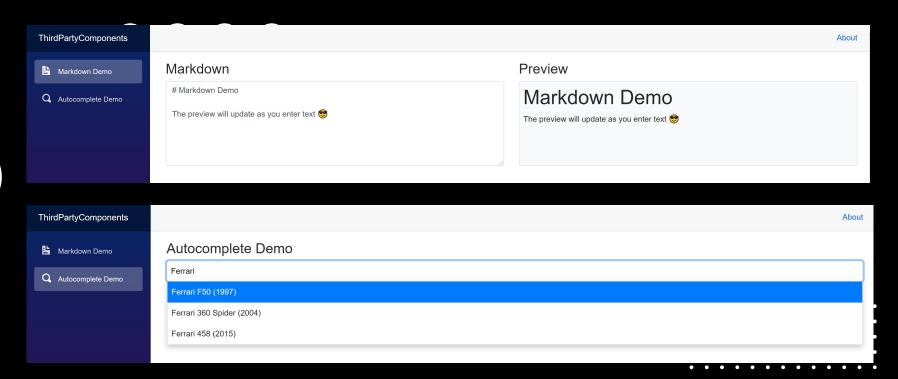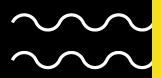- BlazorChifoumi - `last commit may 2020` Exploring machine learning with a Chifoumi game.

Mobile

- Mobile Blazor Bindings - Experimental Mobile Blazor Bindings - Build native mobile apps with Blazor.
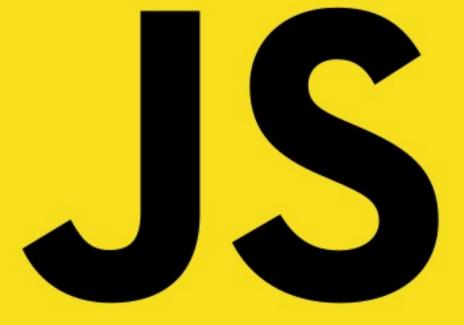
Visit https://github.com/AdrienTorris/awesome-blazor for more

DEMO
THIRD PARTY
COMPONENTS

ThirdPartyComponents   About

Markdown Demo

📄 Markdown Demo

🔍 Autocomplete Demo

Markdown

Markdown Demo

The preview will update as you enter text 😎

Preview

Markdown Demo

The preview will update as you enter text 😎

ThirdPartyComponents   About

📄 Markdown Demo

🔍 Autocomplete Demo

Autocomplete Demo

Ferrari

Ferrari F50 (1997)

Ferrari 360 Spider (2004)

Ferrari 458 (2015)

DEMO

JSINTEROP

Summary

- Routing and Navigation

- Authentication Providers

- Cascading Parameters

- Forms and Validation

- Vendor Support – Telerik Stocks, MatBlazor

- Themes of .NET

- https://github.com/dotnet/MobileBlazorBindings

Resources

- [awesome-blazor](#)
- [Blazor Train](#)
- [GitHub repo for this presentation](#)

THANKYOU
/
QUESTIONS
/
FEEDBACK