



riganti



DotVVM

MVVM Web Apps in ASP.NET Core

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Options for LOB Apps

- ASP.NET Web Forms
- ASP.NET MVC
- REST API + Angular / React / Vue / Knockout
- DotVVM

What is DotVVM?

- Open source framework
- Two-way data-binding
- Component-based
- Strongly typed
- Visual Studio 2017 integration
- Supports .NET Framework & .NET Core
- Developed in Czech Republic
 - More than 20 people in the team

How Does It Work?

```
public class ContactFormViewModel
{
    public string Name { get; set; }

    public string Email { get; set; }

    public void Submit()
    {
        ContactService.Submit(Name, Email);
    }
}
```

```
<div class="form-control">
    <dot:TextBox Text="{value: Name}" />
</div>
<div class="form-control">
    <dot:TextBox Text="{value: Email}" />
</div>
<div class="button-bar">
    <dot:Button Text="Submit"
        Click="{command: Submit()}" />
</div>
```

MVVM

- View
 - HTML markup
 - Data binding & server controls
 - Generates HTML with Knockout JS syntax
- ViewModel
 - C# class
 - Manages the state of UI
 - Handles commands invoked by the user
- Model
 - Functions and objects published by business layer
 - DTO, facades & services

How To Start?

- Install the Visual Studio Extension
 - <https://www.dotvvm.com/install>
- File > New Project
 - OWIN
 - ASP.NET Core + full .NET Framework
 - ASP.NET Core + .NET Core

DEMO

Simple App with DotVVM

Features of DotVVM

- GridView control
 - Server-side paging & sorting
 - Column templates
 - Row decorators
- GridViewDataSet<T>
 - LoadFromQueryable method
 - or set Items and TotalItemCount manually

DEMO

GridView

Features of DotVVM

- Validation
 - Supports .NET validation attributes
 - [Required]
 - [EmailAddress]
 - ...
 - Server-side & client-side (if possible)
- Customizable appearance
 - `Validator.InvalidCssClass`, `Validator.SetToolTipText...`
 - `Validator.Value` marks the elements to apply the rule
- `ValidationSummary`

DEMO

Validation

Features of DotVVM

- Single Page Application
 - The page is still loaded
 - Content is changed dynamically
- SpaContentPlaceholder
- /#!// must be in URL
 - will be changed in future versions of DotVVM thanks to History API
 - both URL formats will work (backwards compatible)

DEMO

Single Page Applications

Features of DotVVM

- Globalization, Date & Number Formatting
 - .NET format string syntax
 - `FormatString="d"`
 - Support in
 - Literal
 - TextBox
 - GridViewTextColumn
 - ...
 - `{resource: ...}` – RESX localization

DEMO

Date & Number Formatting

Features of DotVVM

- Action & Exception Filters
- Dependency Injection support
- Server-side Rendering
- DotVVM Dynamic Data
 - <https://github.com/riganti/dotvvm-dynamic-data>

Integration with ASP.NET

- NuGet packages
 - **DotVVM.Owin** or **DotVVM.AspNetCore**
- Can be integrated with other technologies
 - ASP.NET MVC
 - <https://github.com/riganti/dotvvm-samples-combo-with-mvc>
 - ASP.NET Web Forms
 - <https://github.com/riganti/dotvvm-samples-combo-with-webforms>
- **Modernizing legacy Web Forms apps**

DotVVM Platform

- Free

- Framework with built-in controls
- Visual Studio extension
 - Project templates, basic IntelliSense

- Commercial

- Visual Studio extension
 - Fully-featured IntelliSense
- Bootstrap for DotVVM
- DotVVM Business Pack
 - <https://themes.dotvvm.com>
- Support

Links & Resources

- Documentation
 - <https://www.dotvvm.com/docs>
- Gitter chat
 - <https://gitter.im/riganti/dotvvm-cz>
- GitHub
 - <https://github.com/riganti/dotvvm>
- Homepage
 - <https://www.dotvvm.com>



www.dotvvm.com

@dotvvm

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