

Ignite your ASP.NET MVC Applications with Spark View Engine

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What is Spark View Engine?

A view engine for ASP.NET MVC and Castle MonoRail that gives you the full capabilities of C# (and other languages) within your views via an HTML-friendly syntax

Why Spark?



Spark turns this...

```
<%
    Person person = ViewData["Coder"] as Person;

    if (person != null)
    {
%>
        <h2><%= String.Concat(Html.Encode(person.FirstName), " ", Html.Encode(person.LastName)) %></h2>

<%
        foreach (Address addy in person.Addresses)
        { %>
            <div>
                <pre>
                    <%= addy.Street %><br />
                    <%= addy.MiscLine %><br />
                    <%= addy.City %>, <%= addy.State %> <%= addy.Zip %>
                </pre>
            </div>
        }
%>
    } %>
```

...into this!

```
<viewdata coder="Person" />

<test condition="coder != null">

<h2>!{String.Concat(coder.FirstName, " ", coder.LastName)}</h2>

<for each="Address addy in coder.Addresses">
  <div>
    <address>
      ${addy.Street}<br />
      ${addy.MiscLine}<br if="!String.IsNullOrEmpty(addy.MiscLine)" />
      ${addy.City}, ${addy.State} ${addy.Zip}
    </address>
  </div>
</for>

</test>
```

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- ...that use other view engines like nHaml or nVelocity, but want to learn more about Spark

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- ...that use *MVC*, but want to switch view engines
- ...that know about Spark, but have been apprehensive about using it
- ...that use other view engines like *nHaml* or *nVelocity*, but want to learn more about Spark
- ...that just haven't had the time to sit down and learn Spark

...until now!

Agenda

1. History of Spark
2. Getting Started
3. Concepts and Syntax
4. More Concepts
5. Gotchas
6. References
7. Wrap-up

Introducing Spark - History



Lou D

May 06, 2008
8:25 PM

re: Code Based Repeater for ASP.NET MVC

What if the few things you needed in a view language fit into the html seamlessly?

(crossing fingers about formatting)

```
<var i="0" />
<var css="new string[] {row, 'row-alt'}"/>
<table>
<for each="var hobby in Hobbies" i="i+1">
<tr class="$css[i%2];">
<td>$i;</td>
<td>$hobby.Title;</td>
<td>$Html.Function("arg","arg");</td>
</tr>
</for>
</table>
```

<http://haacked.com/archive/2008/05/03/code-based-repeater-for-asp.net-mvc.aspx#67579>

Getting Started With Spark

Getting Started

- Create/Open an MVC project
- Reference Spark.dll and Spark.Mvc.dll
- Configure the view engine
- Start using it!

```
protected void Application_Start()
{
    ConfigureSparkViewEngine(ViewEngines.Engines);
    RegisterRoutes(RouteTable.Routes);
}

protected void ConfigureSparkViewEngine(ViewEngineCollection views)
{
    views.Clear();
    views.Add(new SparkViewFactory());
}
```

```
<section name="spark" type="Spark.Configuration.SparkSectionHandler, Spark"/>
</configSections>
```

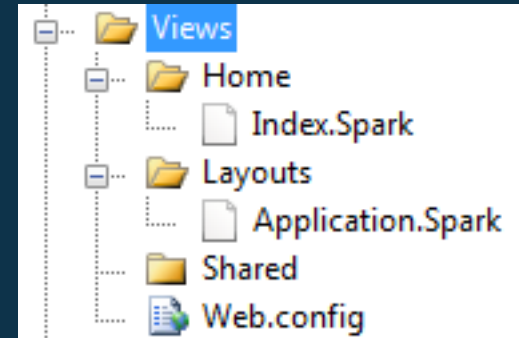
```
<spark>
  <compilation debug="true" />
  <pages automaticEncoding="false">
    <namespaces>
      <add namespace="System"/>
      <add namespace="System.Collections.Generic"/>
      <add namespace="System.Linq"/>
      <add namespace="System.Web.Mvc"/>
    </namespaces>
  </pages>
</spark>
```

Concepts and Syntax

Concepts and Syntax

Layouts

- Layouts\Application.Spark
- Shared\Application.Spark
- View() method
- `<use master="layout" />`



* The above methods are in order from weakest to the strongest. In other words, `<use master="layout" />` takes precedence over having an Application.Spark file in the Layouts folder.

Concepts and Syntax

Named Content

- `<use content="" />` (in layout)
- `<content name=""></content>`, `<content:name></content:name>` (in view)

Concepts and Syntax

Partials

- `<use file="" />`
- `<Partial someVar="" />`

Concepts and Syntax

- Variables

- `<var [var name]="[value]" type="[type]" />` or `def`
- `<global [var name]="[value]" type="[type]" />`
- `<set [var name]="[value]" />`

- ViewData

- `<viewdata key="type" />`

Concepts and Syntax

`_global.Spark`

- Special partial that gets auto-included in a Spark file if it is in the layout folder or the root folder of the view
- Great place to put `<using>` statements, global variables, or other elements that do not immediately write to the output buffer

Concepts and Syntax

Control-of-flow statements

- `<test>` statement, `<if><else>`
- `<for>`
- Attributes on html elements

More Concepts

More Concepts

Inline C#

- Use # to delimit any plain ol' C# code

```
# var pathOfApplication = Context.Server.MapPath("~/");  
# Response.Write(pathOfApplication);
```

More Concepts

Macros

- Methods that can return strings for output

```
<macro name="whatsup" personName="string">  
  <h1 if="!String.IsNullOrEmpty(personName)">What's up, ${personName}!</h1>  
</macro>
```

• • •

```
!{whatsup("Richmond Code Camp")}
```

(Not on the agenda)

These items are beyond this introductory presentation, but Spark supports them:

- Caching of views (partial caching included)
- Pre-compilation of view classes (testing, performance)
- Descriptor Filters for differentiating views based on things like area, theme, or culture

Gotchas

1. Intellisense not working for some types like Html (helpers)
 - The background compiler for Spark isn't finding the assemblies
 - Copy the assemblies local to resolve
2. R#'s intellisense doesn't work with Spark.
 - If using R# and Spark, change R#'s intellisense setting to use Visual Studio's
 - Don't use the <namespaces> section in the web.config file. Use the <using> syntax in the _global.Spark file instead.

References and Links

1. <http://www.sparkviewengine.com>
2. <http://www.whereslou.com>
3. <http://www.github.com/loudej/spark>
4. <http://www.dimecasts.net>

Holla@me

Thank you for your time and attention!

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