

JsRender Fundamentals

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Getting Started with JsRender

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pluralsight
hardcore developer training


Outline

- **What is JsRender**
- **JsFiddle**
- **Why use JsRender**
- **Getting Started in Visual Studio**
- **On Your Mark, Get Set, Go!**
- **Key Resources**

JsRender, in a Nutshell

```
$(my.vm.music).each(function () {  
    var product = this;  
    $("#musicContainer").append(  
        "<div>" + product.model.brand + " "  
        + product.model.name + "</div>");  
});
```

Instead of
this ...



```
<div>  
    {{:model.brand}} {{:model.name}}  
</div>
```

... do this



JsRender

- **Client side JavaScript templating library**
- **Created by Boris Moore**
 - <http://www.borismoore.com>
- **JsRender beta candidate (March 2012)**
- **Currently being used by Windows Azure and Hotmail teams**
 - *Source: Boris Moore*

What is JsRender?

Code-less Syntax

High performance

No DOM Dependency

No jQuery Dependency

No JavaScript
expressions in markup

~20 times faster than
jquery.tmpl !

Client-side JavaScript
Templating

Run with or without
jQuery

JsRender Roadmap

- **jQuery Templates**

<http://jpapa.me/jsrenderroadmap>

- Currently at beta
- No plans for further changes

- **JsRender**

- March 2012 – Beta Candidate
- Pure string based template rendering
- No DOM nor jQuery dependency
- Fast!



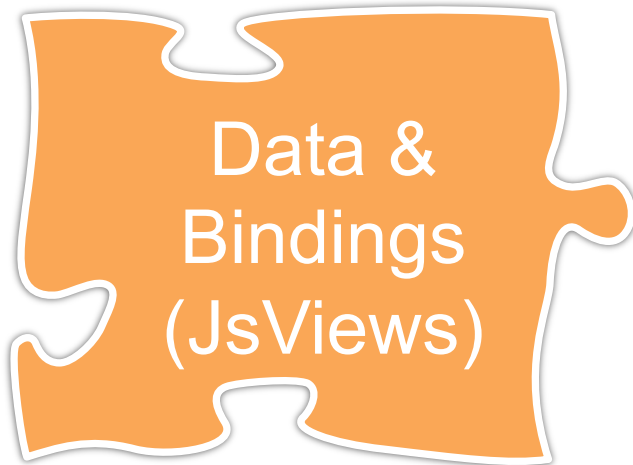
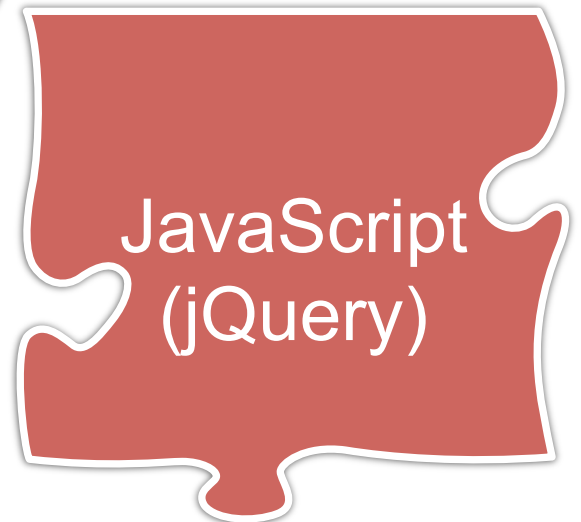
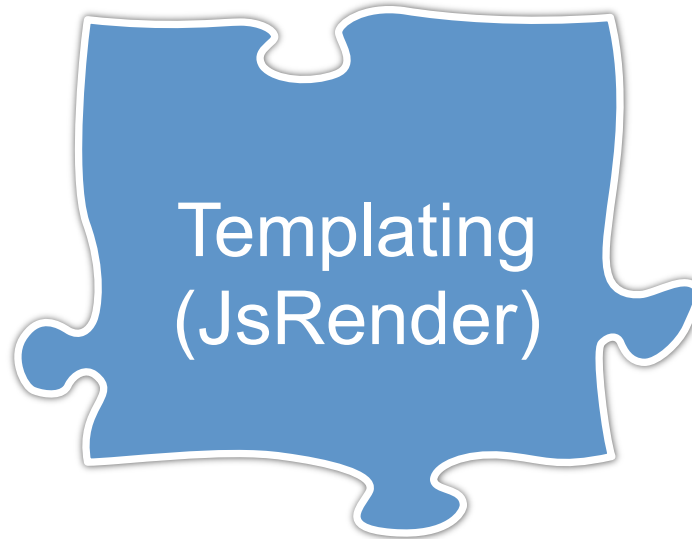
Templating

- **JsViews**

- Beta coming soon
- Data driven views
- Built on JsRender

Data Binding

Client Side Behavior



DEMO

JsRender Benchmarks



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Inspiration

- **Great ideas come quickly**
- **Need a place to jot it down**
- **Try it out quickly**

jsFiddle: Chalkboard for Ideas

- Created by Piotr Zalewa and hosted at <http://jsFiddle.net>
- Free code sharing tool
- Within a browser you can:
 - Edit
 - Fork
 - Execute
 - Debug
- Ideal for quick chalkboard ideas
- Share
 - Embed your fiddles in your own web pages

HTML

jsFiddle

CSS

The screenshot shows the jsFiddle web application interface. At the top, there is a dark blue header bar with the jsFiddle logo on the left and a user profile 'johnpapa' on the right. Below the header, the interface is divided into several sections. On the left, there is a sidebar with a 'Choose Framework' dropdown, a 'Panels' section, and an 'Add Resources' section. The 'Add Resources' section includes a 'JavaScript/CSS URL' input field with a plus icon, and two listed resources: 'jsrender.js' and 'bootstrap.css', each with a close icon. Below the sidebar, there is a 'Read our documentation' link. The main area of the interface is divided into three large panels. The top-left panel is labeled 'HTML' in its top-right corner. The top-right panel is labeled 'CSS' in its top-right corner. The bottom-left panel is labeled 'JavaScript' in its top-right corner. The bottom-right panel is labeled 'Result' in its top-right corner. A blue arrow points from the 'HTML' label to the top-left panel. Another blue arrow points from the 'CSS' label to the top-right panel. A third blue arrow points from the 'JavaScript' label to the bottom-left panel. A fourth blue arrow points from the 'Results' label to the bottom-right panel. At the bottom of the interface, there is a footer with a keyboard shortcuts icon and the text 'jsfiddle.net'.

JSFIDDLE ALPHA

Run Save Reset TidyUp JSLint

johnpapa

Choose Framework

Panels

Add Resources

JavaScript/CSS URL +

jsrender.js ✕

bootstrap.css ✕

Info

Testing Ajax requests

Examples

Legal stuff and credits

Read our [documentation](#)

Keyboard shortcuts

jsfiddle.net

HTML

CSS

JavaScript

Result

JavaScript

Results

<http://jsfiddle.net>

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jsFiddle



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Why Use JsRender / Templating

- **Building HTML and adding it to the DOM via script can be:**
 - Mixture of concerns
 - String concatenation
 - Hard to read/maintain

Life Without Templates

Appending
Elements

```
$(my.vm.music).each(function () {  
    var product = this;  
    $("#musicContainer").append(  
        "<div>"  
        + product.model.brand + " "  
        + product.model.name + "</div>"  
        + "<div> $ " + product.pricing.salePrice  
        + "</div>"  
        + "<img src='../images/"  
        + product.gallery.mainPhoto  
        + "' style='height:80px;'/>");  
});
```

Life With Templates

HTML

```
<div> {{:model.brand}} {{:model.name}} </div>  
<div>$ {{:pricing.salePrice}}</div>  

```

JavaScript

```
$("#output").html($("#myTpl").render(products));
```

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With and Without Templates



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Coding with JsRender in Visual Studio

- **File | New Project**
 - Empty Web Application
- **Reference jQuery (or not)**
- **Reference JsRender**
 - Get source from GitHub
 - <https://github.com/BorisMoore/jsrender>
- **Intellisense in *.js files**

```
/// <reference path= "/scripts/jsrender.js" />
```

Valuable Visual Studio Extensions

- [NuGet](#)
 - manage 3rd party libraries and references
- [Web Essentials](#)
 - Code collapsing, add vendor specific CSS properties, much more
- [Web Standards Update](#)
 - HTML intellisense and validation
- [WoVS Default Browser Switcher](#)
 - Quickly change the default browser from Visual Studio
- [JSLint](#)
 - JavaScript code analysis
- [CSSCop](#)
 - Catches common CSS issues
- [Resharper 6](#)
 - JavaScript refactoring tools



Free



Free Trial Only

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Getting Started in Visual Studio



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3 Steps to JsRender

Template

```
<script id="movieTemplate" type="text/x-jsrender">  
  <div>{{:name}}</div>  
  <div>Year Released: {{:releaseYear}}</div>  
</script>
```

Container

```
<div id="myContainer"></div>
```

Render

```
$("#myContainer").html(  
  $("#movieTemplate").render(movies)  
);
```

DEMO

JsRender in 3 Steps



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Resources

- JsRender source code
 - Boris Moore
 - StackOverflow
 - jsFiddle
 - Bootstrap
- <https://github.com/BorisMoore/jsrender>
 - <http://www.borismoore.com>
 - <http://jpapa.me/jsrenderSO>
 - <http://www.jsfiddle.net>
 - <http://twitter.github.com/bootstrap>

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