Got a CMS? Get Your Webdevmojo Back with JavaScript!

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Wednesday, December 10, 2014
2:00 p.m. – 3:00 p.m.
Presentation and code examples at:
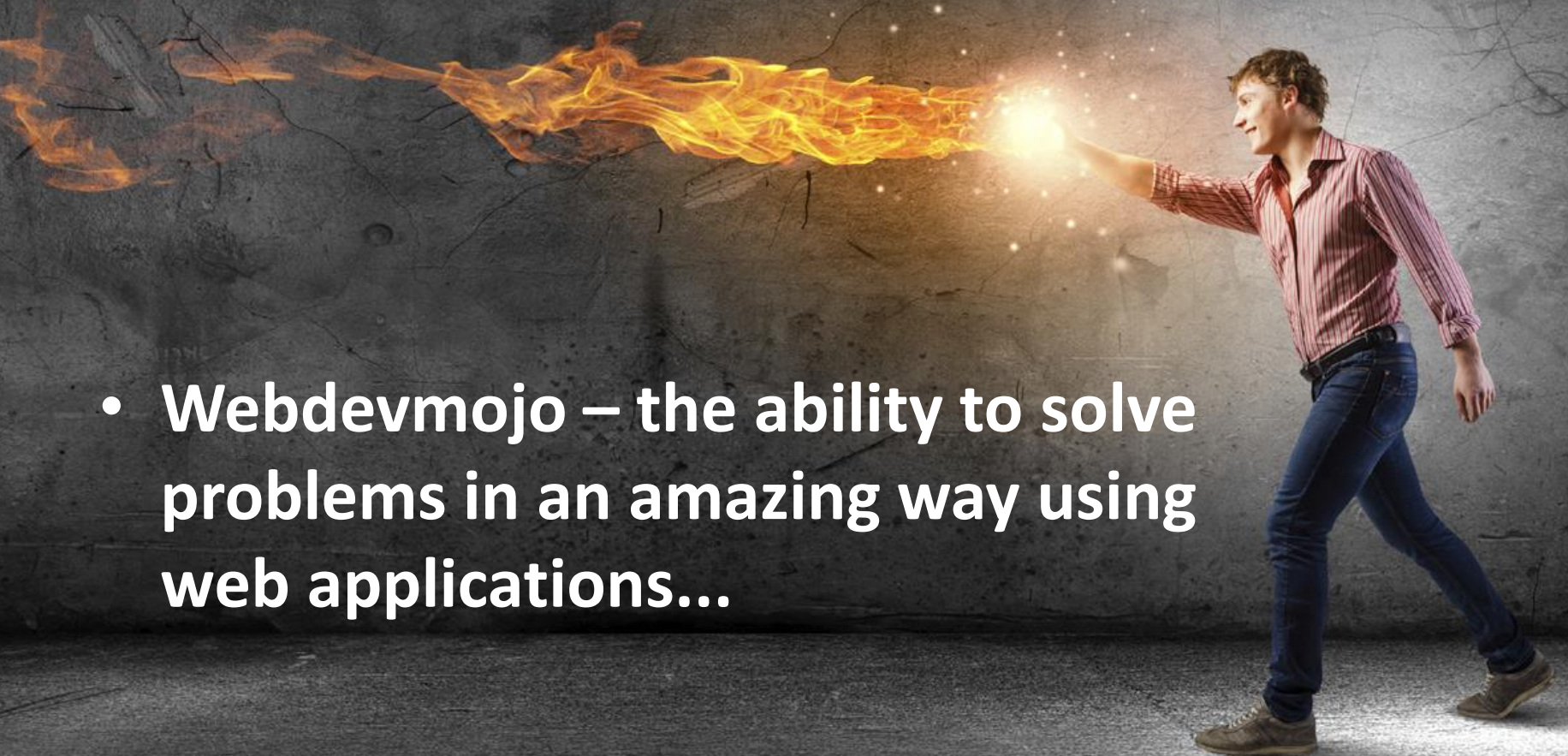http://paul-burtness.github.io/webdevmojo/

Lost your mojo?

What is it?

- **Mojo – a power that may seem magical and that allows someone to be very effective**

- **Webdevmojo – the ability to solve problems in an amazing way using web applications…**

How do you lose it?

How do you lose it?

- Migrate your website from a self-hosted site you build and control…

- To a managed-hosting site built with a 3rd-party Content Management System (CMS)

- Pros – no longer responsible for managing a server, distributed authoring, etc.

- Cons – format limitations, limited to built-in functions

How do you get it back?

- Contract with vendor to customize the CMS

- Modify the CMS yourself

- Build applications on another server

- Integrate your applications with the CMS
  demo – http://www.anokacounty.us/InmateLocator

Why JavaScript?

- Flash – security issues, no iOS support

- Java – runtime issues, learning curve

- JavaScript – universal support, appropriate for wide range of solutions, approachable

How do you play?

```html
<html>
<head>
<title>My JavaScript Page</title>
<script type="text/javascript"
     src="http://yourserver.com/js/script.js">
</script>
</head>
<body>
<h1>
<script type="text/javascript">
     document.write("Hello World");
     alert("It worked!");
</script>
</h1>
</body>
</html>
```

Can you play?

- Probably cannot access <head> section
- Need to get <script> code into the <body> of the HTML
- Rich text editor with HTML editing or a Custom HTML editor
- Put in a new page and try it (test version?)
- Does it display? Does it cause an error?
- demo – http://www.anokacounty.us/tryit

PLAYGROUND

TEMPORARILY CLOSED

Why can't you play?

- Security risk of script insertion
- Interference with other scripts on the page
- Vendor quality control
- Just because

Why would they let you play?

- Response from vendor: CivicPlus
- Allow for flexibility when needed without overwhelming basic users with too many options
- Maintain security through permission structures, workflows and server-level security
- Document center allows for CSV and CSS files

What do you have to play with?

- JavaScript – statements, functions, objects, DOM interaction, etc.

- JavaScript Libraries – example: jQuery

- Use "View Source" or "Inspect Element" to see if jQuery is loaded

- Try simple code to see if you can use it
  demo – http://www.anokacounty.us/tryjquery

Plays well with others

How do you "play well with others?"

- Problem – If your CMS uses JavaScript, your code can break the page (but not the CMS)

- Reason – By default all JavaScript on the page is global

- Consequences – You can overwrite existing variables and functions on the page, or the page can overwrite yours
  demo – http://www.anokacounty.us/youbrokeit

How do you "play well with others?"

- Solution – Create a JavaScript "namespace," a single global object that contains all your variables and functions

- Reference - http://www.kenneth-truyers.net/2013/04/27/javascript-namespaces-and-modules/

- Code walkthrough

Why would you want to play?

- Customize design
- Include information from other sources on your site (JSONP and CORS)
- Enhanced use of information from your site (RSS and site API)
- Custom solutions

Patterns

- ## Change page design
  http://www.anokacounty.us/2092/Charitable-Giving-Campaign
  http://www.anokacounty.us/list.aspx

- ## Use referrer code
  http://www.anokacounty.us/355/Integrated-Waste-Management

- ## Use a data document
  http://www.anokacounty.us/278/Estimated-Tax-Calculator

- ## Display data from another system
  http://www.anokacounty.us/1405/Adult-Trial-Updates
  http://www.anokacounty.us/727/Inmate-Locator

Keep it accessible

- Cognitive – simple and straightforward
- Physical – mouse and keyboard interface, touch friendly
- Vision – dynamic content
  http://www.w3.org/WAI/intro/aria.php
  http://speckyboy.com/2013/02/04/myths-about-how-blind-people-use-the-internet/

Working environment

- IDE – Visual Studio Express, Brackets, Webstorm
- Method – build/test in a stand-alone page
- Method – test/refine in a live page
- Version Control – create a project and track versions using git (github.com or bitbucket.com) or other VCS
- Tracking – keep a list of pages with JavaScript

Thank You!

Thank You!

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Presentation and code samples at:

http://paul-burtness.github.io/webdevmojo