# Web Testing Tools You Can Use



Automation Engineer | Writer | Speaker | Board Member





# Shout out to Alan Page

- Alan Page of Unity
- He originally gave this workshop at STAREast and then recommended I do it here at STARWEST
- I recommend checking out his blog: <a href="https://angryweasel.com/blog/">https://angryweasel.com/blog/</a>
- More importantly Alan Page and Brent Jensen have an amazing podcast called AB Testing
  - They are also authors of the Modern Testing Principles: https://www.angryweasel.com/ABTesting/modern-testing-principles/

# Your printout probably doesn't match my slides



Or: <a href="https://qithub.com/ckenst/testing-todays-web-apps">https://qithub.com/ckenst/testing-todays-web-apps</a>



### Goals

- Try some tools
- Ask Questions
- Learn from one another
- Find something you can use / apply on Tuesday (or whenever you get back)
- Note: Everything we use here should work on Windows & Mac

# Some things we may talk about\*

- A whole lot of browser extensions
  - Bug Magnet, Form Filler, Check my Links, more...
- Big List of Naughty Strings
- Developer Tools
- Postman
- Docker
- CypressIO

# What do you use? Why are you here?

- 1. What tools do you currently use in your testing?
- 2. What are some tools you want to know more about?

# Browser Extensions (Chrome mostly)

- Form Filler
  - Quickly generate random data for all kinds of forms inputs
- Bug Magnet
  - Quickly locate test data for forms to test boundaries, credit cards, etc.
  - o Make your own?
- SiteImprove Accessibility Checker
  - Ones your site have the most basic level of accessibility in place?
  - o If not are you at risk for legal action?
- Check My Links
  - Quickly discover invalid or redirected links on a page
- VisBug
  - Debug web visuals like a UX designer

# Big List of Naughty Strings

- https://github.com/minimaxir/big-list-of-naughty-strings
- Naughty Strings?

```
Numeric Strings
#
       Strings which can be interpreted as numeric
0
1
1.00
$1.00
1/2
1E2
1E02
1E+02
-1
-1.00
-$1.00
-1/2
```

# Try the Big List of Naughty Strings app

- Node Library: <a href="https://www.npmjs.com/package/big-list-of-naughty-strings">https://www.npmjs.com/package/big-list-of-naughty-strings</a>
- Node Validation app: https://www.npmjs.com/package/naughty-string-validator

### node

- > var naughty = require('naughty-string-validator');
- > naughty.getRandomNaughtyString();

# **Developer Tools**



Delivery Zip Code

I'm a Florist

Help Sign up

Log in

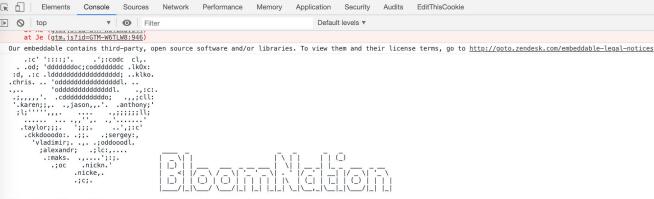
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Manifest: property 'start\_url' ignored, should be same origin as document.

manifest.json:1

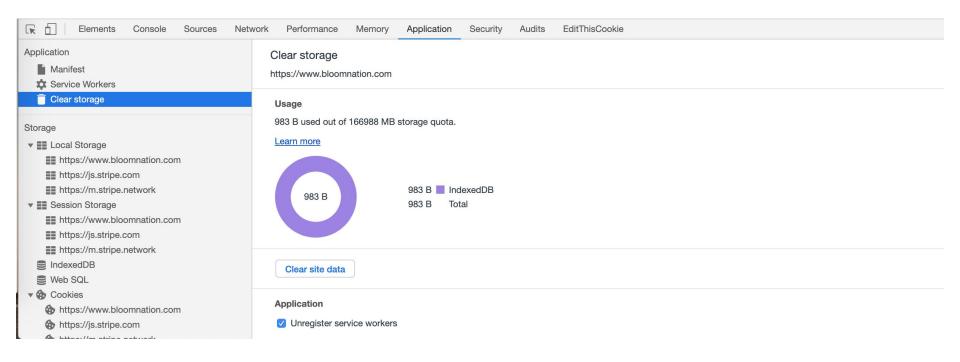
**◎**1 **△**2

welcome.js:24

common vendor.eb3555b...js:1

0

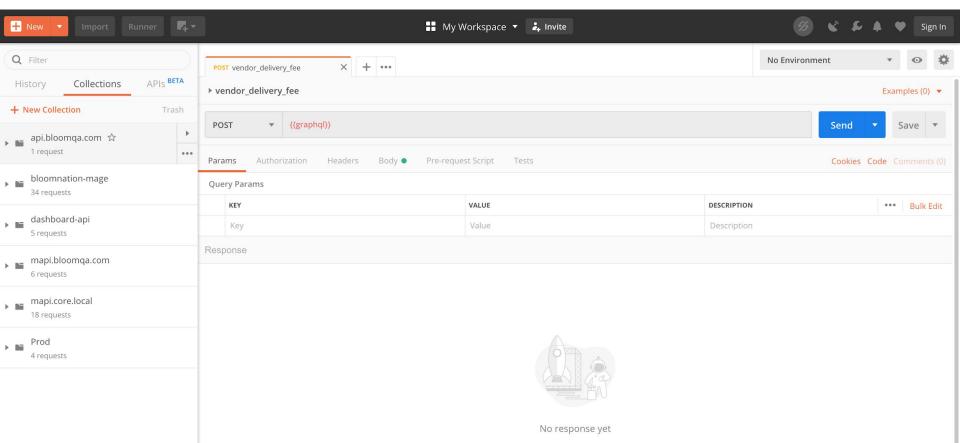
### DevTools 2



### Performance & SEO Tests

- https://www.webpagetest.org/
- Google Chrome's Audit's for SEO (lighthouse)

### Postman



# **HTTP Status Codes (the good ones)**

1×× Informational	2×× Success	3×× Redirection
100 Continue	200 OK	300 Multiple Choices
101 Switching Protocols	201 Created	301 Moved Permanently
102 Processing	202 Accepted	302 Found
	203 Non-authoritative Information	303 See Other
	204 No Content	304 Not Modified
	205 Reset Content	305 Use Proxy
	206 Partial Content	307 Temporary Redirect
	207 Multi-Status	308 Permanent Redirect
	208 Already Reported	
	226 IM Used	

# **HTTP Status Codes (the bad ones)**

4×× Client Error	414 Request-URI Too Long	5×× Server Error
400 Bad Request	415 Unsupported Media Type	500 Internal Server Error
401 Unauthorized	416 Requested Range Not Satisfiable	501 Not Implemented
402 Payment Required	417 Expectation Failed	502 Bad Gateway
403 Forbidden	418 I'm a teapot	503 Service Unavailable
404 Not Found	421 Misdirected Request	504 Gateway Timeout
405 Method Not Allowed	422 Unprocessable Entity	505 HTTP Version Not Supported
406 Not Acceptable	423 Locked	506 Variant Also Negotiates
407 Proxy Authentication		
Required	424 Failed Dependency	507 Insufficient Storage
408 Request Timeout	426 Upgrade Required	508 Loop Detected
409 Conflict	428 Precondition Required	510 Not Extended
410 Gone	429 Too Many Requests	511 Network Authentication Required
411 Length Required	431 Request Header Fields Too Large	599 Network Connect Timeout Error
412 Precondition Failed	444 Connection Closed Without Response	
413 Payload Too Large	451 Unavailable For Legal Reasons	
	499 Client Closed Request	

### Docker



### Docker

- Containers isolate applications (kind of like Virtual Machines), but...
- Provide pre-configured, cloneable, application runtime environment.
- Library of containers at <a href="http://hub.docker.com">http://hub.docker.com</a>
- Solves many of the problems with "test environments"
- Verify installation: docker run hello-world
  - Run a command in an image
  - Try images via docker pull
  - Create a docker image via docker build

# CypressIO

- Non-Selenium based Web Automation Framework
- Fairly straightforward

Until now, end-to-end testing wasn't easy. It was the part developers hated. Not anymore. Cypress makes setting up, writing, running and debugging tests easy. "Can't say enough about @Cypress\_io! Makes testing modern and legacy code a snap. The GUI tools are amazing and the CLI just works. Having a video of each test spec is @ " - Nick DeNardis **Before Cypress** → With Cypress 
→ Choose an assertion library Choose a framework Mocha Expect.js Jasmine QUnit Karma All-in-one testing framework, assertion library, with mocking and stubbing, all without Selenium. Choose a Selenium wrapper ---Sinon Nightwatch Webdriver TestDouble

## Questions?





### Get In Touch

- Let me know what works and what doesn't work for you
  - Share your success and failures
- Contact
  - o chris@kenst.com
  - @ckenst on twitter, linkedin, github
  - o www.kenst.com

