

Insanity, Hubris or Necessity?

I went and wrote my own web testing framework.

BarCamp Philly 2012

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Relay Network

Business to Consumer Communications

We Made a Web-App

(yay!)

Btw, It has to run on...

IE7

IE8

Chrome

Firefox

Safari

...and on...

Android (many versions)

iPhone

iPad

That's What our Users Use.

That's what we'll test on.

As Tech, I have
Needs
(Goals)

Goal:

Automation!

* I've used Selenium Before,
you can't make me do that again.

Automation:

I want it to run on:

- Phones
- Tablets
- Desktop Browsers

Automation:

I want it to run:

- Headless
- On my CI Server
- Minimal Install

Goal:

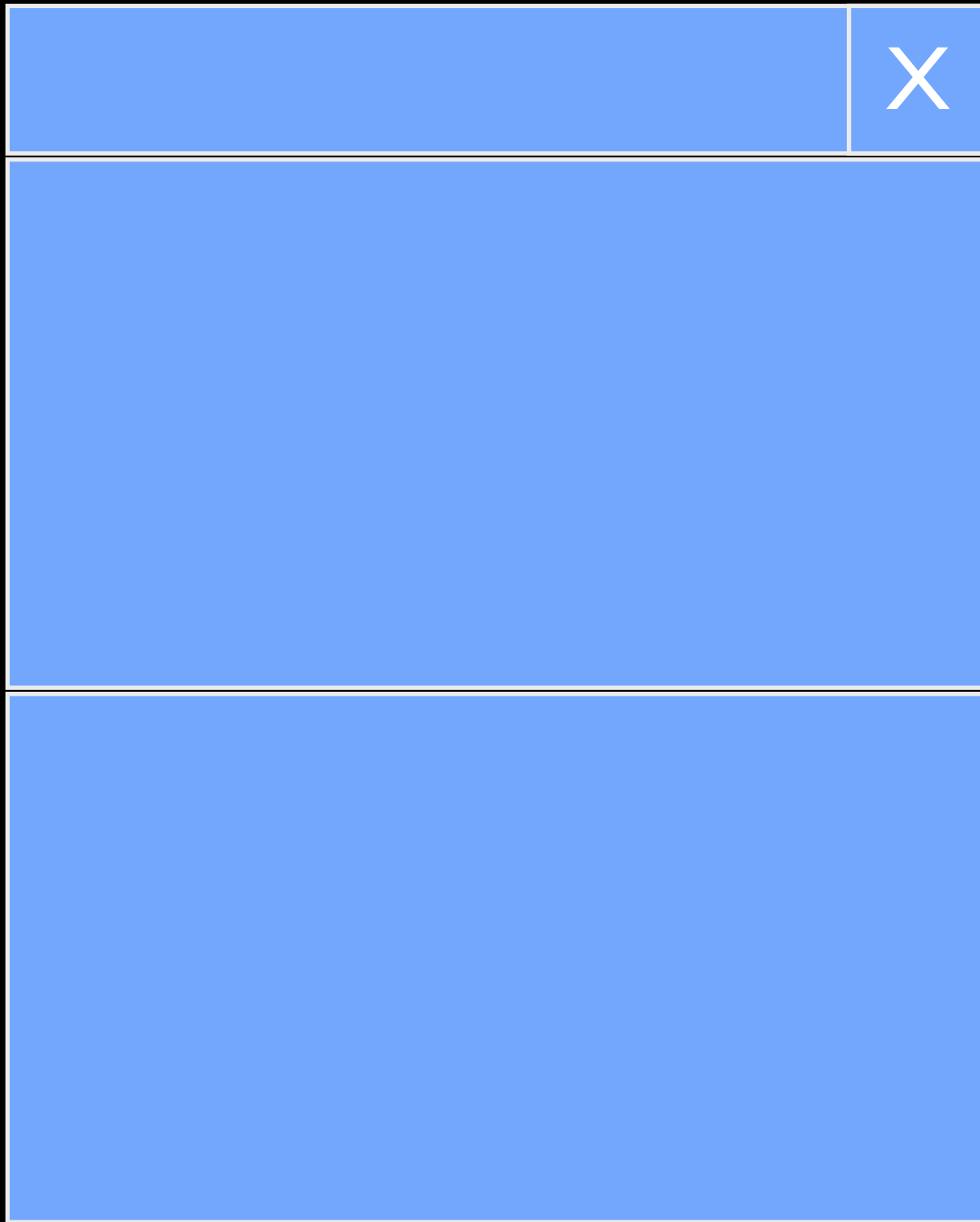
Reduce Accidental Complexity

A large part of my
Selenium, Jasmine and
Webdriver Tests Were
Waiting for Async Events

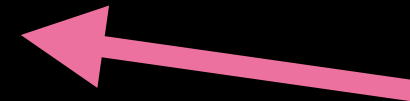
(maybe I was doing it wrong?)

So I thought: why not
use frames and a
state machine?

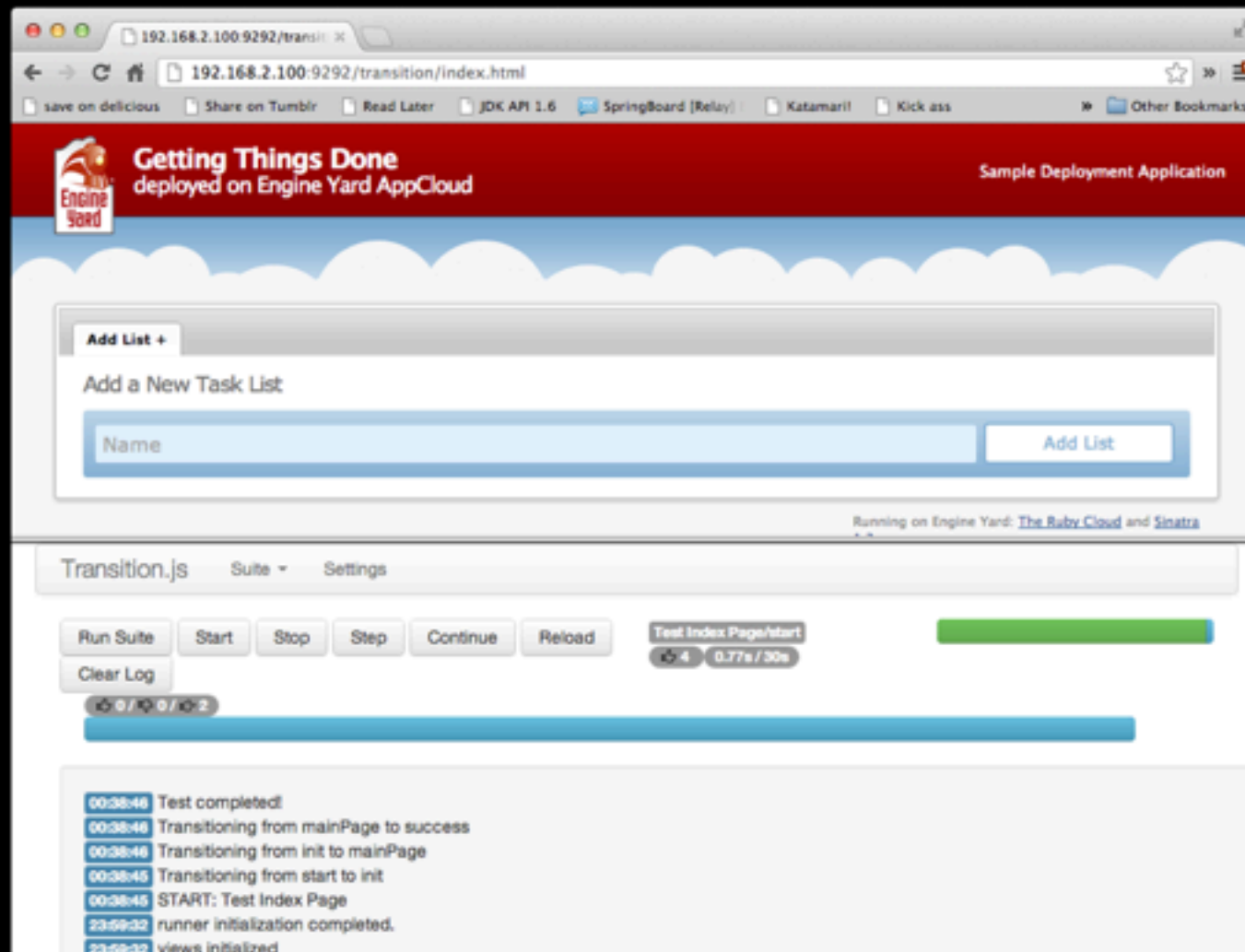
(I know, now I have 2
problems :)



Upper Frame
is the Web App



Lower Frame
is the Testing UI

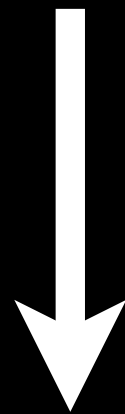


Upper Frame
is the Web App

Lower Frame
is the Testing UI

* Works on Phones (though is a bit small)

Click
Something



When Async Operation
Completes

Click The
Next Thing

Goal:

Reduce Complexity

State Machine Factors Out Polling for Async Events

```

(function () {
  this.addTest({
    name: 'Add a List',

    states: [
      this.newState('init', this.navigateTo_('/'))
        .to('deleteList', this.elementExists_('li a:contains("Test")'))
        .to('mainPage', this.elementNotExists_('li a:contains("Test")')),

      this.newState('deleteTestList', 'deleteTestList')
        .to('deleteList', this.elementExists_('li a:contains("Test")'))
        .to('mainPage', this.elementNotExists_('li a:contains("Test")')),

      this.newState('mainPage', this.navigateTo_('/'))
        .to('createList', this.elementExists_('input[name="list[name]"]:visible')),

      this.newState('createList', 'createTestList')
        .to('success', this.elementExists_('li a:contains("Test")'))
    ],

    deleteTestList: function () {...},
    createTestList: function () {...}
  });
}.call(Transition));

```

Demo:

Todo App in Chrome

Demo:

Todo App in iPhone Simulator

Demo:

Todo App in Phantom.js Runner

Transition.js

Pro: Runs in the Browser

Pro: Minimal Install

Pro: Factors Out Waiting

Con: Uses Frames

kyleburton.github.com/transition.js/site/2.0/

Thank You

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