

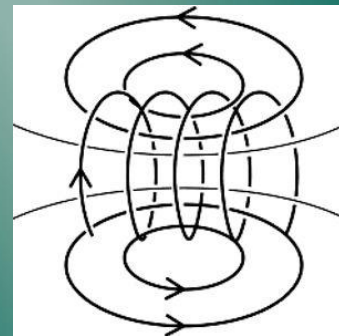
AliceJS

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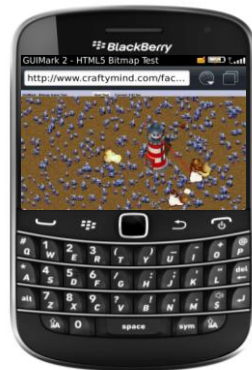
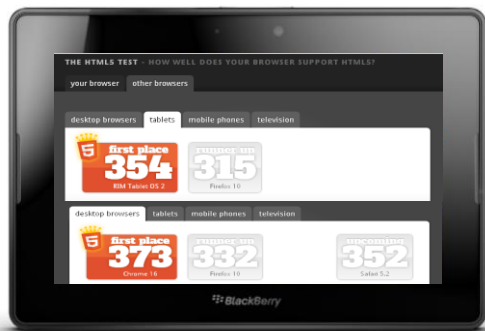
2012-03-15, AsyncJS Brighton



AsyncJS
Brighton



We Love The Web



- Industry leading WebKit browser with best in class standards support: full desktop-class rendering
 - position:fixed, overflow:scroll shipped in Spring 2011 on PB, and late Summer 2011 on BB7 devices, WebGL and accelerated Canvas in PlayBook OS 2.0 in Feb 2012.
- Full Web Application platform across tablets and smartphones
 - WebWorks and Apache Cordova
- Leading edge Web dev tools for inspection, debugging, emulation
 - Ripple and Web Inspector (on PB and BB7 devices since Spring 2011)



* **Native Is Better Syndrome**

- The “Native Is Better” crowd are missing the point of the Web
 - ▶ It’s the scale of the market: powerful, cross-platform, and an abundant skill set.
- This is not to say that Web is better than Native
 - ▶ That would be silly
- But the Web is absolutely competitive
 - ▶ Most types of apps can now be built very nicely using Web technologies
 - ▶ The gap is narrow today, keeps on getting narrower, and fast.
- Native and Web will coexist with the Web likely taking the mass market (> 50% apps)
 - ▶ But Native experience is the competitor to Web experience

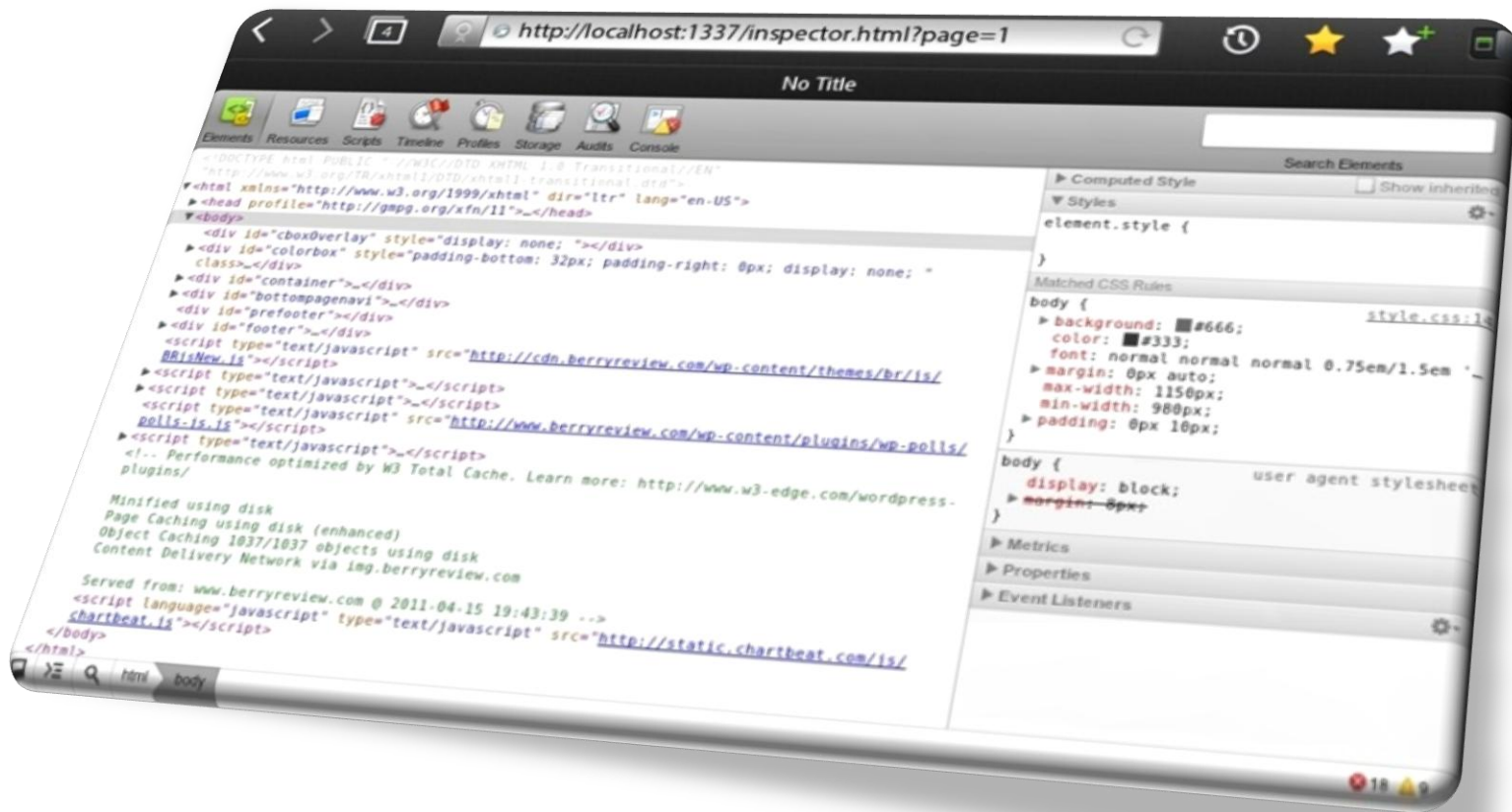


- Bring desktop-class development experience to mobile
 - ▶ **Remote Web Inspector** desktop allows you to real-time test/debug your app from your desktop
 - ▶ Edit/Refresh/Test cycle dear to the Web remains intact for Mobile Web development
- Focus on mobile testing
 - ▶ Emulate mobile HTML5 rendering, layout and APIs with **Ripple**
 - ▶ Greatly reduce the need for simulators
 - ▶ Edit/Refresh/Test cycle dear to the Web remains intact for Mobile Web development (again)

Ripple: Browser-based Emulation



Web Inspector: Ultimate Web Dev Tool





Intro

- I wanted to do simple effects such as buttons that vibrate when clicked, or cards that flip in 3D and so on.
- I had seen those effects everywhere on the iPhone, and on platforms such as Flash and Silverlight
- I knew CSS could do it, but was surprised that all I could find really were samples with boatloads of CSS markup
 - ▶ Like 50+ lines of CSS to do a simple 3D flip effect?

```

    text-shadow: 0 3px 3px #333; margin: 50px 0 0; text-align: center;
}
#browser {
    margin: 0 auto; text-align: center;
    text-shadow: 0 3px 3px #333;
}
#browser em {
    font: italic 20px Georgia, Serif; color: #0066;
}
#transformer-rule {
    width: 750px; position: relative; margin: 50px auto;
}
.container {
    width: 324px; height: 412px;
    -webkit-perspective: 1000;
}
.card {
    width: 324px; height: 412px;
    border: 5px solid #fff;
    -webkit-transform: rotate(180deg);
    -webkit-transition: 0.5s;
}
.container:hover .card {
    -webkit-transform: rotate(180deg);
}
.face {
    position: absolute;
    -webkit-backface-visibility: hidden;
}

```

← Demo headers

← Add position relative, to allow positioning of child elements

← Center up the Transformers demo

← Perspective adds depth to the effect

← Preserve-3D ensures the content is flipped properly

← Rotate by 180 degrees on the Y axis for 0.5 seconds

← Hide the opposite side of the card when flipped

← Transform: rotate() adds some angles to the cards

```

#magtron .back {
    width: 284px; height: 372px; padding: 20px;
    -webkit-transform: rotate(180deg);
    background: #a3a3a3 url(texture.png);
}
#magtron .back h2 {
    width: 281px; height: 42px; margin: 0 auto 20px auto;
    background: url(#magtron-title.png); text-indent: -9999px;
}
#magtron img {
    float: right;
}
#magtron p {
    float: left; width: 185px; margin: 0 0 20px 0;
    font-size: 17px; line-height: 28px; color: #666666;
}
#magtron dl {
    font-size: 36px; font-weight: bold;
    line-height: 48px; color: #777777;
    width: 264px; padding: 5px 10px; overflow: hidden;
    background: #cccccc url(#gradient.png) repeat-y;
    text-indent: 0 1px 1px #f5f5f5;
}
#magtron dl dt {
    float: left; clear: both;
}
#magtron dl dd {
    float: right;
}

```

← Float the logo and text side by side

← Font styling for the DL is set

← Box-shadow and text-shadow adds subtle shading effects

← Like the stats up so they appear on one line, clear the float on the next DT

← Optimus card is positioned to the right

```

#optimus {
    float: left; position: absolute; top: 120px; right: 20px;
    -webkit-transform: rotate(-30deg);
}
#optimus .front {
}
#optimus .back {
    width: 284px; height: 372px; padding: 20px;
    -webkit-transform: rotate(180deg);
    background: #a3a3a3 url(texture.png);
}
#optimus .back h2 {
    width: 272px; height: 33px; margin: 0 auto 20px auto;
    background: url(#optimus-title.png); text-indent: -9999px;
}
#optimus img {
    float: right;
}
#optimus p {
    float: left; width: 185px; margin: 0 0 27px 0;
    font-size: 17px; line-height: 28px; color: #666666;
}
#optimus dl {
    font-size: 36px; font-weight: bold;
    line-height: 48px; color: #777777;
    width: 264px; padding: 5px 10px; overflow: hidden;
    background: #cccccc url(#gradient.png) repeat-y;
    text-indent: 0 1px 1px #f5f5f5;
}
#optimus dl dt {
    float: left; clear: both;
}
#optimus dl dd {
    float: right;
}

```

← Check fix to gracefully degrade when viewed in Firefox and later versions of Internet Explorer.

<http://line25.com/articles/super-cool-css-flip-effect-with-webkit-animation>

It felt like this!

 BlackBerry.



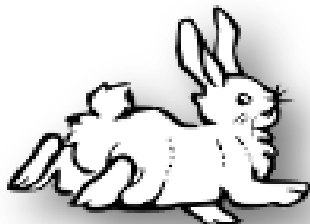
© New Line Cinema

It should be more like this!



<http://www.snorgtees.com/friday-the-12th>

- I felt like Alice In Wonderland (except not as a girl), following the white rabbit anywhere it would lead me down the hole of unexplored territory



- Can I package advanced CSS transitions and animations?
- Can I go beyond the Fade, Slide, Flip, Zoom effects that seem to have defined “advanced” Web visuals since 2007?



© Constantin Film Produktion





CSS The Beautiful

- CSS is not just about styling anymore
- It can do 2D and 3D animations, transitions and a whole lot more
- Now accelerated on major mobile platforms such as the BlackBerry PlayBook
- You could build a game with CSS and nothing else
- More frameworks sprouting out everywhere

- Emeric Florence (@boblemarin)
- <http://minimal.be/lab/Sprite3D/>
- Scene graph with CSS
- Powerful programmatic 3D development implemented in terms of CSS

- Joe Lambert (@joelambert)
- <http://www.joelambert.co.uk/flux>
- Powerful visual image transitions: The Supper Gallery
- Uses CSS in novel ways: who knew border was so versatile?



A Lightweight Independent CSS Engine

- **Simplicity** means one line of code for any effect
- **CSS likeness** to make it easy to one day perhaps integrate in the standard
- **DOM-level** animations (not just for image galleries)
- **Rich** collection of effects
- **Organics** so that effects are always mysteriously slightly different
- Small, completely independent, self-contained, and easily integratable into other frameworks
- Cross Platform (BlackBerry, Chrome 14+, Safari 5+, Firefox 10+, iOS, Android)
- Apache 2 License



- Growing number of innovative visual effects targeting games, visual apps, as well as business apps
- Simply define your HTML elements, and AliceJS takes care of everything
- AliceJS code is just one line to apply an effect to any HTML element
- Rich parameterization allows high degree of variability
- Organics adds randomization to effects that never go stale

Demo 1

Wobble, Toss, PhantomZone, Fade, Drain



Some Code


```
<!DOCTYPE html>
<HTML lang="en">
  <BODY>
    <SCRIPT src="js/src/alice.core.js"></SCRIPT>
    <SCRIPT src="js/src/alice.plugins.cheshire.js"></SCRIPT>
    <BR><BR>
    <TABLE border="0px" align="center" cellspacing="40px">
      <TR><TD>
        <IMG id="e1" src="images/logo_header_plain.png">
      </TD><TD>
        <FORM id="e2">
          Name: <INPUT type="text"/><BR>
          Pswd: <INPUT type="text"/>
        </FORM>
      </TD></TR></TABLE>
    <BR><BR>
    <CENTER><BUTTON onClick="animate_n()">Animate Normal</BUTTON><BR>
      <BUTTON onClick="animate_o()">Animate Organic</BUTTON></CENTER>
    <SCRIPT type="text/javascript">
      var a = alice.init();
      function animate_n() { a.wobble(["e1", "e2"], 10, "center", "1000ms", "ease-in-out"); }
      function animate_o() { a.wobble(["e1", "e2"], {value: 20, randomness: 80}, "center",
        {value: 1000, randomness: 20}, "ease-in-out");
      }
    </SCRIPT>
  </BODY>
</HTML>
```

Images

Any DOM
element too!

Organics



I officially apologize to
Chris Heilmann and Paul Irish
for using upper-case tags *

* And everybody else here who also finds that practice repulsive ☺

Demo 2

Hello World

JavaScript Code:

```
a.wobble(["e1", "e2"], {value: 20, randomness: 80}, "center",  
          {value: 1000, randomness: 20}, "ease-in-out");
```

Putting CSS glasses on, it could look like this:

```
#MyDiv {  
  animate-wobble: randomize(20deg, 80%) center randomize(1000ms, 20%) ease-in-out;  
}
```

Or

```
#MyDiv {  
  animate-wobble-rotation: 5 80%;  
  animate-wobble-anchor: center;  
  animate-wobble-duration: 1000ms 20%;  
  animate-wobble-timing-function: ease-in-out;  
}
```



```
alice.cheshire({"elems": ["elem1"],  
  "delay": {"value": "0ms", "randomness": "30%"},  
  "duration": {"value": "2500ms", "randomness": "50%"},  
  "timing": "ease-in-out",  
  "iteration": "infinite",  
  "direction": "alternate",  
  "playstate": "running",  
  "move": "left",  
  "rotate": {"value": "90", "randomness": "80%"},  
  "flip": "left",  
  "turns": "4",  
  "fade": "in",  
  "scale": {"from": "1%", "to": "100%"},  
  "shadow": "true",  
  "overshoot": "20%",  
  "perspective": "1000",  
  "perspectiveOrigin": "center",  
  "backfaceVisibility": "visible"});
```





- Bounce
- Dance
- Drain
- Fade
- Hinge
- PageFlip
- Pendulum
- PhantomZone
- RaceFlag
- Slide
- Spin
- Toss
- Twirl
- Wobble
- Zoom
- ...



With the builder tool, you can create your own

Demo 3

Builder



Conclusion

Demo 4

Cards Chaining
Cards Shuffling

<http://blackberry.github.com/Alice>

Laurent Hasson (@ldhasson)

Jim Ing (@jim_ing)



- Wink Toolkit
 - ▶ <http://www.winktoolkit.org/>
- SliceBox
 - ▶ <http://tympanus.net/Development/Slicebox/>
- FluxSlider
 - ▶ <http://www.joelambert.co.uk/flux/>
- Sprite3D JS
 - ▶ <http://minimal.be/lab/Sprite3D/>

- Ripple
 - ▶ <http://ripple.tinyhippos.com/>
- BlackBerry WebWorks
 - ▶ <http://us.blackberry.com/developers/browserdev/>
- BlackBerry WebWorks Handhelds Downloads
 - ▶ <http://us.blackberry.com/developers/browserdev/widgetsdk.jsp>
- BlackBerry WebWorks PlayBook Downloads
 - ▶ <http://us.blackberry.com/developers/tablet/webworks.jsp>
- WebWorks Open Source on GitHub
 - ▶ <https://github.com/blackberry>

THANK YOU

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