

# HTML5 and Mobile:

## New Markup & Styles for the Mobile Web

Jason Clark  
Head of Digital Access & Web Services  
Montana State University Libraries

# Overview

- Demos
- View some code bits
- New Features and Functions
- Getting Started
- Questions

# Terms: HTML, CSS, API

Does everybody know what these elements are?

## CSS

- style rules for HTML documents

## HTML

- markup tags that structure docs
- browsers read them and display according to rules

## API (application programming interface)

- set of routines, protocols, and tools for building software applications

# HTML5 as "umbrella" Term

- Changes to HTML spec
- New Javascript APIs
- Additions to CSS spec

# HTML5 Working Examples

BookMeUp

[www.lib.montana.edu/~jason/files/bookme/](http://www.lib.montana.edu/~jason/files/bookme/)

Mobile HTML5 feed app

[www.lib.montana.edu/~jason/files/html5-mobile-feed/](http://www.lib.montana.edu/~jason/files/html5-mobile-feed/)

- Learn more by viewing source
- OR grab the .zip files

# Evolution into HTML5

Reacting to how the web is used

# Semantic & Functional Markup

- header
- footer
- nav
- section
- article
- aside
- mark
- contenteditable attribute

# <form> Markup

<input type="email" required>

<input type="date">

<input type="url">

<input type="email" required autofocus>

# Forms <form>

- field types - email, date, search
- validation
- regular expressions
- still need to watch for security/hacks

# Geolocation

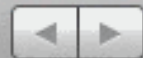
- w3c API
- accurate
- supported in Firefox 3.6, Safari 4

# History API

- Preserve the state of the page
- Enabling back button in client-side scripts



Failed to open page



http://www.apple.com/startpage/



Google



## You are not connected to the Internet.

Safari can't open the page "http://www.apple.com/startpage/" because your computer isn't connected to the Internet.

Network Diagnostics can help you solve network connection problems.

[Network Diagnostics...](#)

# Offline Storage, IndexedDB

- work without a connection
  - Cache manifest file
- SQLite database or key/value store
- Google discontinued Gears effort

# Rounded Elements

- border-radius declaration
- smooth out your interfaces
- button effects

# Transitions

- Animation behavior
  - Scaling, fading, easing, etc.

```
body {  
  -o-transition:all .2s linear;  
  -moz-transition:all .2s linear;  
  -webkit-transition:all .2s linear;  
  transition:all .2s linear;  
}
```

# Columns and Grids

- Layout and page structure
- Goodbye, Float?

```
ul#content {  
  -webkit-column-count: 3;  
  -webkit-column-rule: 1px solid #eee;  
  -webkit-column-gap: 1em;  
  -moz-column-count: 3;  
  -moz-column-rule: 1px solid #eee;  
  -moz-column-gap: 1em;  
  column-count: 3;  
  column-rule: 1px solid #eee;  
  column-gap: 1em;  
  display: block;  
}
```

# Media Queries

- switch stylesheets based on width and height of viewport
- same content, new view depending on device

```
@media screen and (max-device-width:480px) {...mobile styles here...}
```

# Media Queries in Action

```
<link rel="stylesheet" type="text/css"  
  media="screen and (max-device-  
width:480px) and (resolution: 163dpi)"  
href="shetland.css" />
```

Responsive Web Design, Ethan Marcotte

<http://www.alistapart.com/articles/responsive-web-design>

# HTML5 right now? IE?

```
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="utf-8" />
<title>HTML5 right now</title>
<!--[if IE]>
<script
  src="http://html5shiv.googlecode.com/svn/trunk/html5.js"></script>
<![endif]-->
<style>
article, aside, dialog, figure, footer, header, hgroup, menu, nav,
  section {display:block;}
</style>
</head>
<body>
<!-- ready to roll with HTML5 now -->
</body>
</html>
```

# What Type of Support?

- see "When can I use..."
  - <http://a.deveria.com/caniuse/>
- Mobile browsers leading the way
- Modernizr
  - <http://www.modernizr.com/>
- HTML5 enabling script
  - <http://remysharp.com/2009/01/07/html5-enabling-script/>

# Questions?

[twitter.com/jaclark](https://twitter.com/jaclark)

[www.lib.montana.edu/~jason/files.php](http://www.lib.montana.edu/~jason/files.php)

# Demos & Examples

It's your call....

# Demos

- YouTube HTML5 demo
  - <http://www.youtube.com/html5>
- 24 ways CSS3 demo
  - <http://24ways.org/>
- HTML5 Demos
  - <http://html5demos.com/>
- Other possible examples:
  - geolocation
  - localStorage

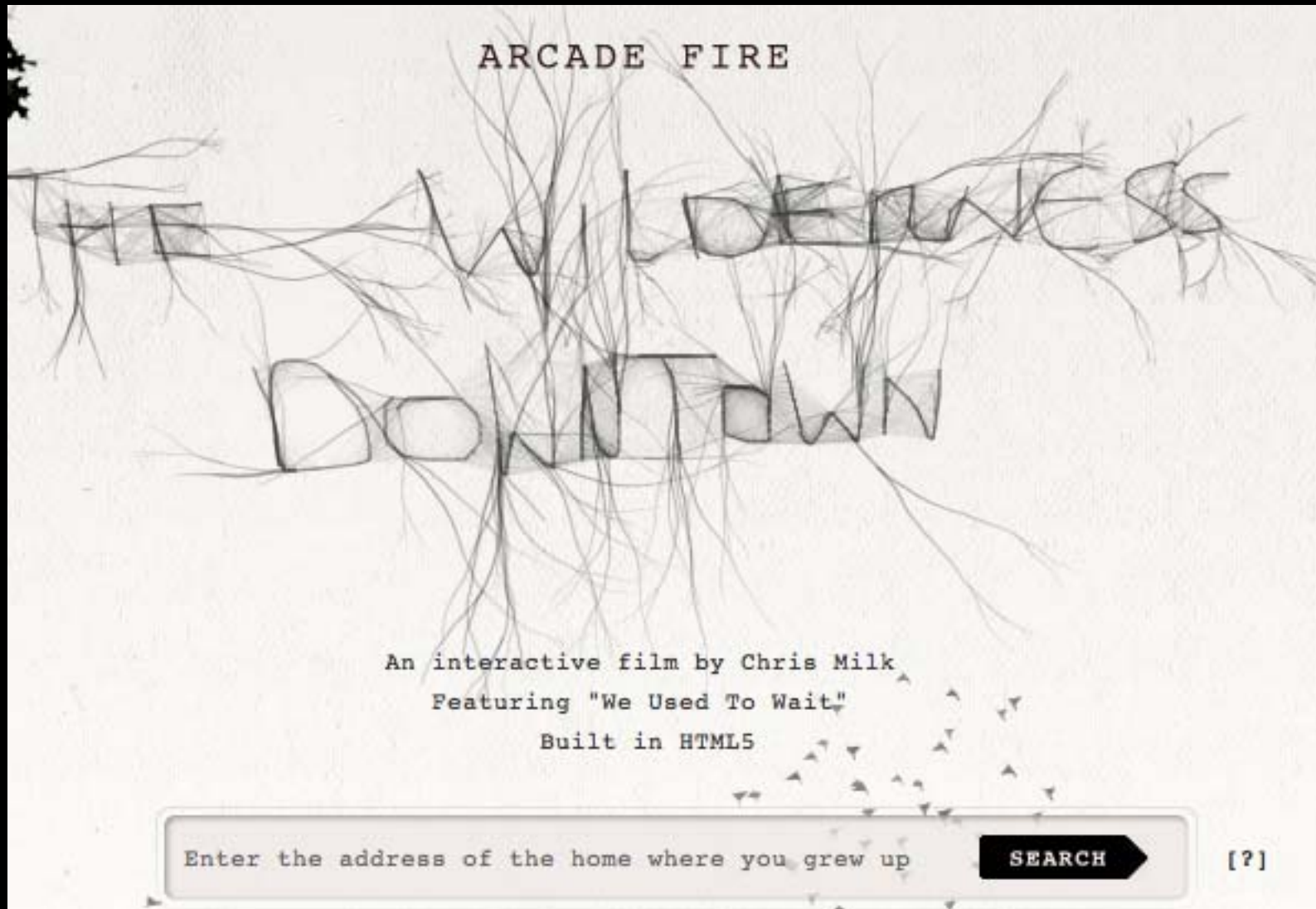


# Links and Anchors

A link is the connection between one piece of hypertext and another.

```
1 <title>Hypertext Links</title>
2 <h1>Links and Anchors</h1>
3 A link is the connection between one piece of
4 <a href=WhatIs.html>hypertext</a> and another.
```

# Chrome Experiments



Arcade Fire - The Wilderness Downtown  
<http://www.chromeexperiments.com/arcadefire/>

Episode IV

## A NEW HOPE

It is a period of civil war. Rebel spaceships, striking from a hidden base, have won their first victory against the evil Galactic Empire.

During the battle, Rebel spies managed to steal secret plans to the Empire's

# Resources

- HTML5 Tag Reference (W3Schools)
  - [w3schools.com/html5/html5\\_reference.asp](http://w3schools.com/html5/html5_reference.asp)
- Cross Browser Support Tables
  - [www.findmebyip.com/litmus/](http://www.findmebyip.com/litmus/)
- HTML5 Doctor
  - [html5doctor.com/](http://html5doctor.com/)
- CSS3 Previews (CSS3.info)
  - [www.css3.info/preview/](http://www.css3.info/preview/)
- HTML5 & CSS3 Cheat Sheets
  - [webresourcesdepot.com/html-5-and-css3-cheat-sheets-collection/](http://webresourcesdepot.com/html-5-and-css3-cheat-sheets-collection/)

# Resources (cont.)

- HTML5 Boilerplate
  - <http://html5boilerplate.com/>
- HTML5rocks
  - [html5rocks.com](http://html5rocks.com)
- Check html5 article
  - [www.findmebyip.com/litmus/](http://www.findmebyip.com/litmus/)