

# HTML5 and CSS3: New Markup & Styles for the Emerging Web

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

# Overview

- Revolution or Evolution?
- New Features and Functions
- Demos
- Getting Started
- Questions

# Hello, My Name is...

- Background, Position
- HTML, Programming experience?
- Experience with CSS3?
- What do you want to learn most?

# 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

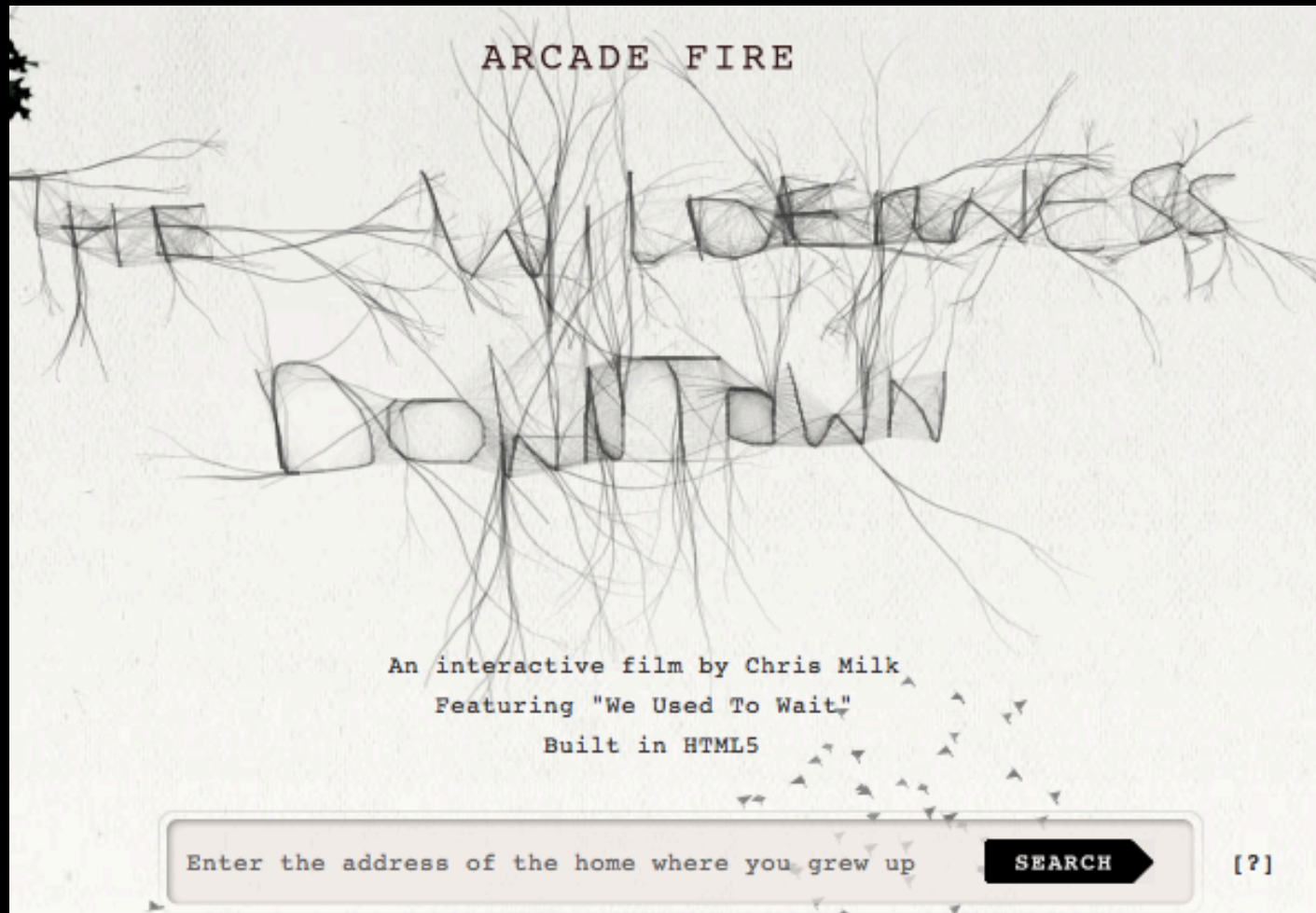


# Links and Anchors

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/>

# HTML5 as "umbrella" Term

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

# Evolution into HTML5

Reacting to how the web is used

# A Minimal HTML5 Document

```
<!DOCTYPE html>  
<html lang="en">  
<head>  
  <meta charset="utf-8">  
  <title>title</title>  
  <link rel="stylesheet" href="style.css">  
  <script src="script.js"></script>  
</head>  
<body>  
  <!-- page content -->  
</body>  
</html>
```

# Semantic & Functional Markup

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

# Native Video and Audio

- simple markup
- no plugin!
- limited formats: .ogv, .mp4

```
<video src="turkish.mp4" controls></video>
```

# Forms <form>

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

# <form> Markup

<input type="email" required>

<input type="date">

<input type="url">

<input type="email" required autofocus>

# Geolocation

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

# LocalStorage

- mega COOKIE
- remembers preferences without scripting

# Offline Storage, Web Workers

- work without a connection
- sqlite database
- Google discontinued Gears effort

# Evolution into CSS3

Rethinking web displays and styles

# Rounded Elements

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

# Gradients/Opacity

- no more background images
- transparency



We landed on the moon and we left stuff there. A lot of it.

5 9 2 3 7

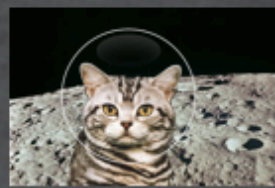
things left so far.



1 BIG DOUGHNUT



1 LAWNMOWER



1 ASTRO CAT



1 RECLINER



1 MAGIC GNOME

## LATEST THING NEWS

### New things discovered this week

Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure **dolor in reprehenderit** in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat

## TOP CATEGORIES

Furniture	185 items	
Fashion	4,729 items	
Pets	4 items	

CSS3 example - <http://css3exp.com/moon/>

# 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>

# @Font-Face

- bring in fonts
- use any licensed TrueType (.ttf) or OpenType (.otf) font
- independent of machine it's being rendered on...

# 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

# 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/>

# 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/)

# Questions?

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

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

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  
forces managed to steal secret  
plans to the Empire's