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

Computers in Libraries
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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.
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.

LATEST THING NEWS

New things discovered this week
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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…"
  o http://a.deveria.com/caniuse/
• Mobile browsers leading the way
• Modernizr
  • http://www.modernizr.com/
• HTML5 enabling script
Resources

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

- HTML5 Boilerplate
  - http://html5boilerplate.com/
- HTML5rocks
  - html5rocks.com
- Check html5 article
  - www.findmebyip.com/litmus/
Questions?

twitter.com/jaclark
www.lib.montana.edu/~jason/talks.php
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 ultimate weapon, the Death Star.