HTML5 and Mobile: New Markup & Styles for the Mobile Web

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Overview

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

Mobile HTML5 feed app
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
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.

```css
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
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
Questions?

twitter.com/jaclark
www.lib.montana.edu/~jason/files.php
Demos & Examples

It's your call....
Demos

• YouTube HTML5 demo
  o http://www.youtube.com/html5
• 24 ways CSS3 demo
  o http://24ways.org/
• HTML5 Demos
  o http://html5demos.com/
• Other possible examples:
  o geolocation
  o 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.

http://www.w3.org/History/19921103-hypertext/hypertext/WWW/Link.html
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, Rebels managed to steal secret plans to the Empire's death star.
Resources

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

• HTML5 Boilerplate
  o http://html5boilerplate.com/
• HTML5rocks
  o html5rocks.com
• Check html5 article
  o www.findmebyip.com/litmus/