

WHAT IS HTML5?

HTML



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WHAT IS HTML5?

- Introduction: History of HTML
- What's new?
 - Canvas tag
 - Geolocation
 - Video and audio tags
 - Offline and local storage
 - Drag and drop
 - New semantic tags
- What are the benefits of using HTML5?
- Can I use it today?

INTRODUCTION

- HTML was first created in **1990**
- HTML 4.01, the latest release of HTML before HTML5, was published in **1999**
- XHTML was widely used in the 2000s, but it didn't add anything new to the language - just made the language stricter
- HTML5 is a big step forward, adding new tags and capabilities to the language
- Started being developed in 2004, but became more mainstream around 2009/2010
- Still very much in development today - expected to become an official "Recommendation" by the W3C in **2014**

CANVAS TAG

- The `<canvas>` tag lets you create complex graphics and animation using HTML and JavaScript
- Can make graphics and games that previously only Flash could do
- Canvas tag has really strong support from Apple and Google

CANVAS TAG

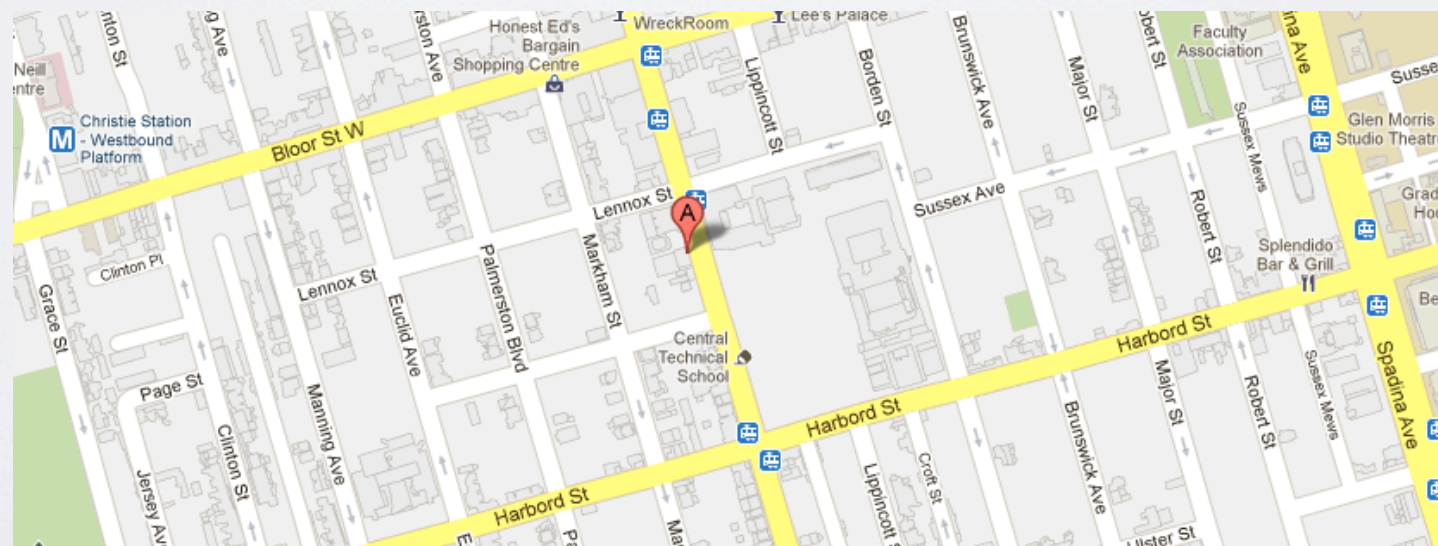


CANVAS TAG

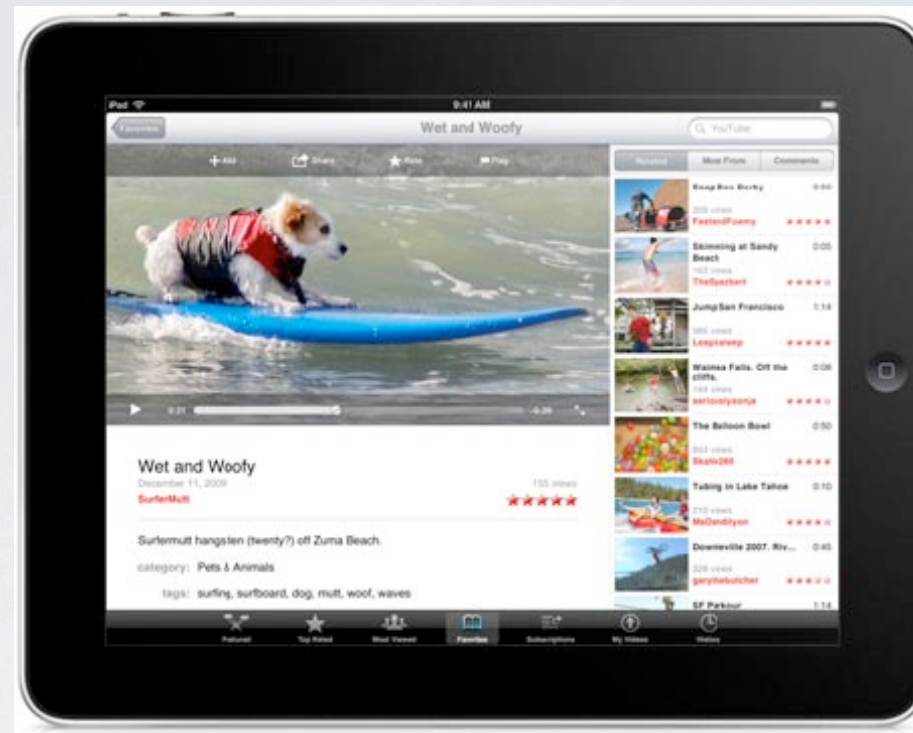


GEOLOCATION

- Geolocation is a fancy way of saying that HTML will **let your web application know where the user is located** (if they're using GPS or WiFi)
- Can pinpoint you on a map, or find search results catered to your location
- Really useful when you're creating web apps for mobile
- Before, this kind of feature would only be found in a “native app”. **Now we can do all sorts of interactive stuff in the web browser.**



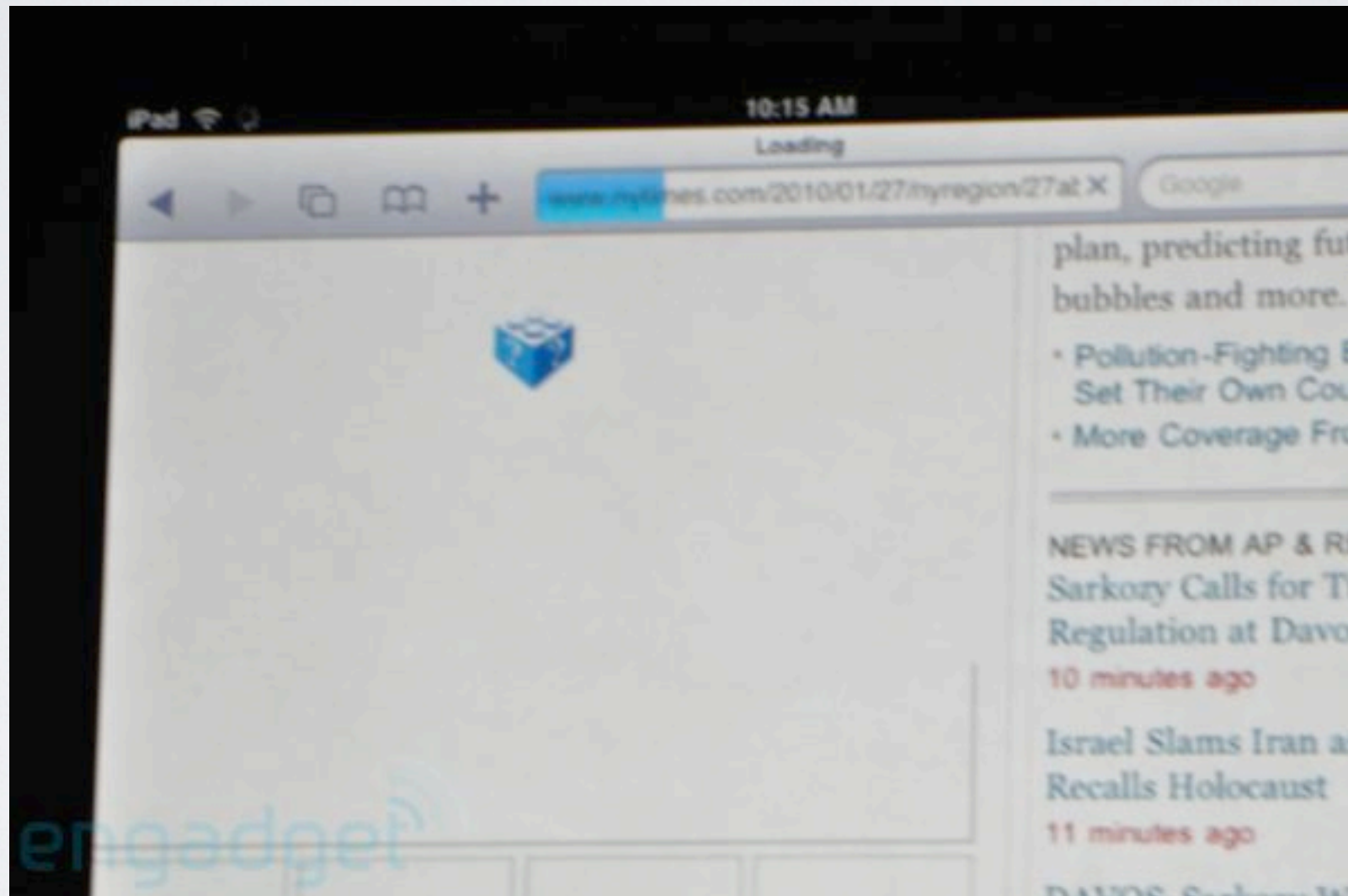
VIDEO AND AUDIO TAGS



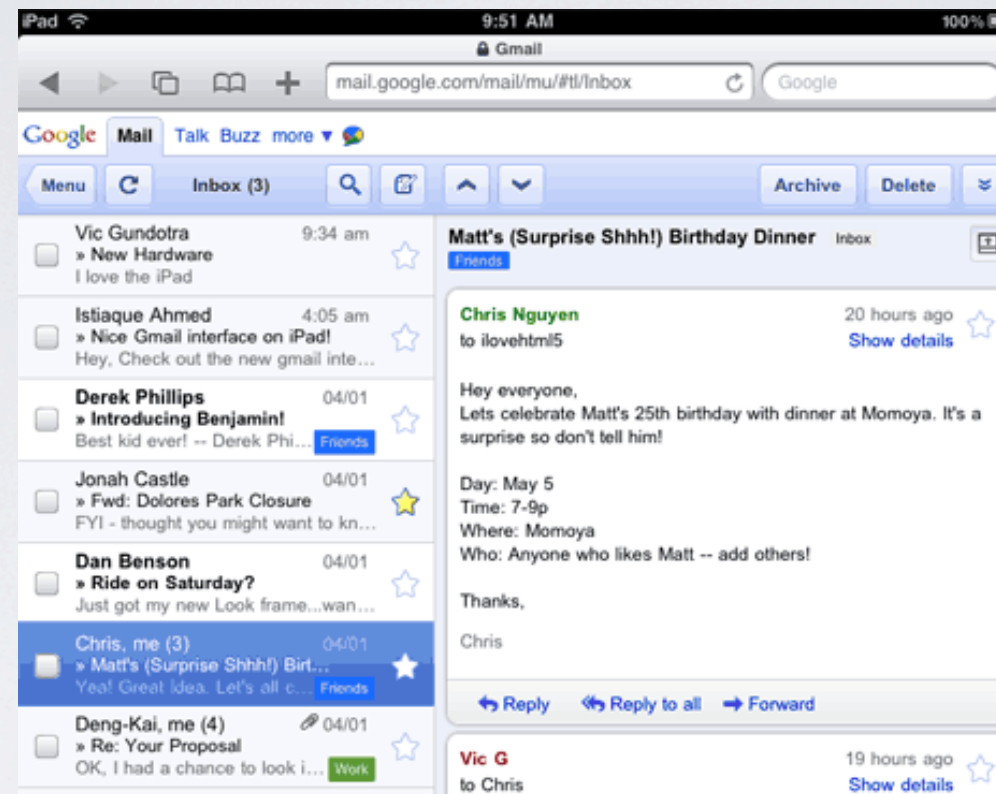
- New `<video>` and `<audio>` tags allow you to embed video and audio into a website **without using any third party plugins** (like Flash - this is how video has been done until now)
- Works pretty well in Safari, Chrome, iPads, iPhones, and Android phones
- `<video>` tag became a lot more popular when Apple took a strong stand against having Flash installed on iPhones/iPads
- YouTube is already testing out an HTML5 player - check it out on a computer at: <http://www.youtube.com/html5>

VIDEO AND AUDIO TAGS

With HTML5, you'll be seeing less of this!



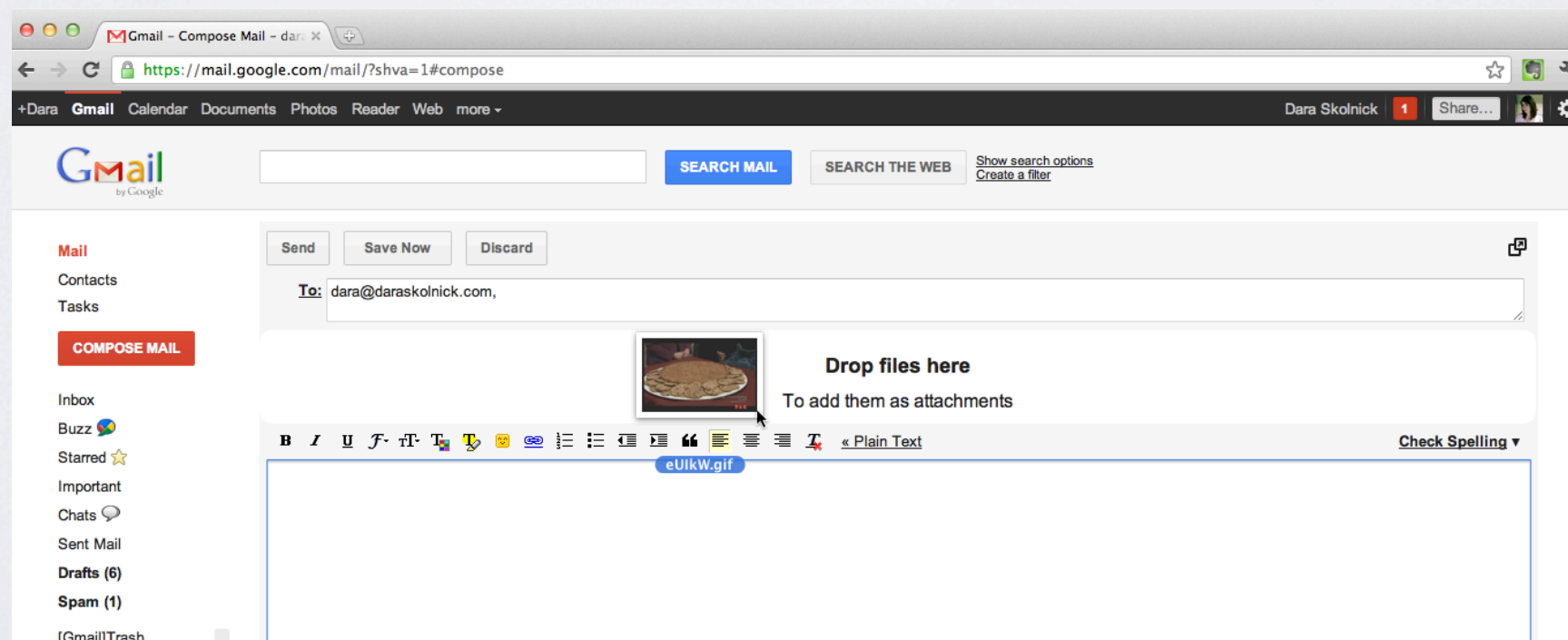
OFFLINE & LOCAL STORAGE



- With offline and local storage, you can now use (HTML5) web apps **even when you're not connected to the Internet**
- Really helpful for apps like webmail and calendars
- A good example is running Gmail on an iPad from the web browser - if you go offline, you can still access your email, and when you come back online, everything syncs up behind the scenes

DRAG & DROP

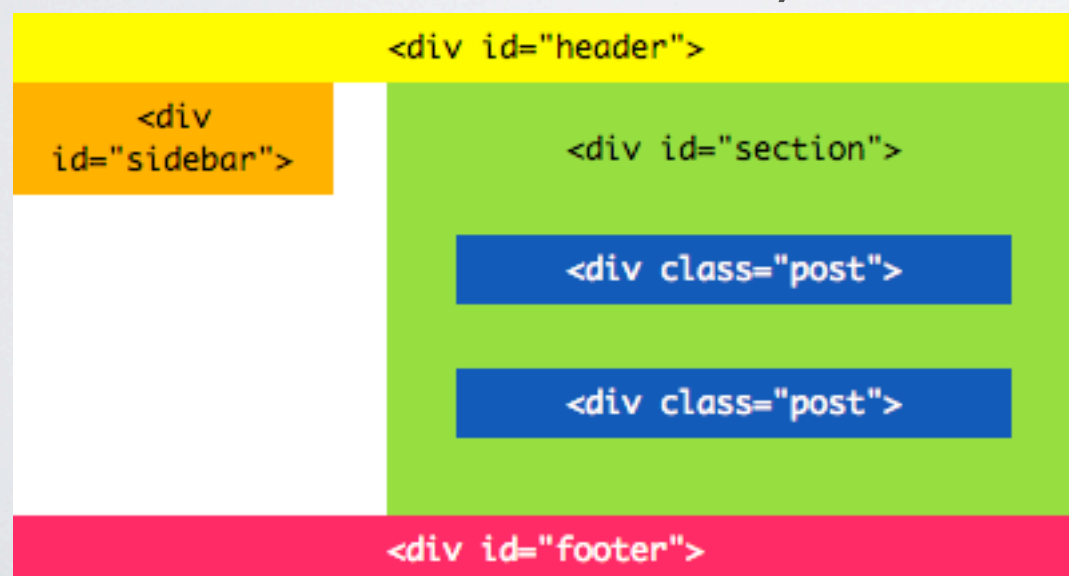
- In HTML5 web apps that use drag & drop, you can **drag files from your computer right into the website**
- Two best examples are Gmail and YouTube, and the browser that best supports this right now is Chrome
- Example: when composing an email in Gmail, I can now drag a picture from my desktop and drop it right into the message.



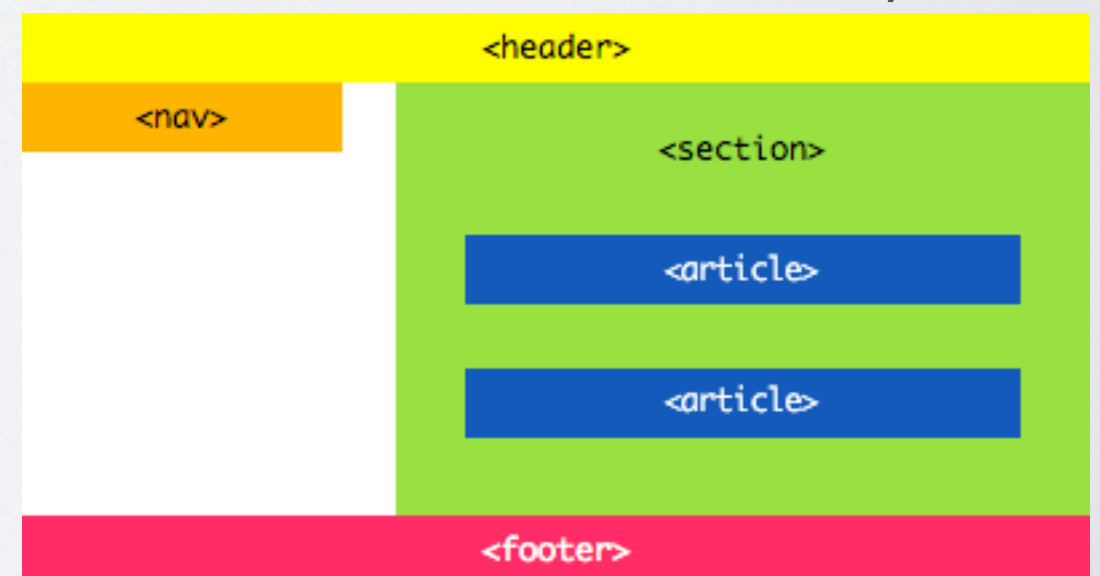
SEMANTIC TAGS

- New tags in HTML5: `<section>` `<article>` `<header>` `<footer>` `<aside>` `<nav>`
- Sites using these tags will look the same to most users, but this will help **search engines** and **screen readers** (which read out webpages to people with visual impairments) to understand what's what on your site

The old way



The HTML5 way



WHY USE HTML5?

- Using HTML instead of 3rd party plugins will make websites more accessible to a larger audience (e.g. using the `<video>` tag instead of Flash video on phones and tablets)
- Now we can make web apps that act like ‘native apps’ (programs that are written for one specific platform) — because they’re accessed via a web browser, they can be used by people on all kinds of operating systems (Windows, Mac, Linux) and devices (computers, phones, tablets)
- HTML5 is an “open” technology, meaning that anyone can write HTML5 sites and apps without having to buy any proprietary software or pay any membership fees. You also don’t have to conform to the rules of a closed system, like the iPhone’s app store.

WHY USE HTML5?



HTML5 Kindle Cloud Reader

CAN I USE IT TODAY?

- Yes... and no.
- Right now, different browsers all support different aspects of HTML5. Support is **especially limited in old versions of Internet Explorer.**
- There's **no single point at which it'll be OK to start using all of HTML5**, so developers need to keep an eye on when different parts get adopted by browsers and judge how much they want to use accordingly. See: <http://html5readiness.com>
- One place where it's pretty safe to use lots of HTML5 is for **smartphones**. 95% of smartphones (especially Android and iPhone) are equipped with HTML5-supporting browsers, so we're going to see a lot of HTML5 on mobile devices first. Examples: LinkedIn, and Amazon Kindle all have HTML5 sites for mobile. Facebook is rumoured to be working on an HTML5 app as well.



RESOURCES

- <http://html5-showcase.com/>
- <http://diveintohtml5.org/>
- <http://html5doctor.com/>
- <http://www.html5rocks.com>
- <http://html5demos.com/>
- <http://developer.apple.com/safaridemos/> (for Safari users only)

THE END!

HTML

