



HTML5 and Browser

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灰狐就是协作

collaboration for everyone!

灰狐 Huihoo



Huihoo是个社区,一个协作与分享的社区,我们关注自由、开源软件



HTML5 and Browser

议题

- 目前最热的Web技术: HTML5, CSS3, JavaScript
- Firefox, Chrome, Opera, Safari, IE 对HTML5的支持
- 演示, 体验 HTML5
- 说说 Flash



Web技术发展史

1991 HTML

1994 HTML 2

1996 CSS 1 + JavaScript

1997 HTML 4

1998 CSS 2

2000 XHTML 1

2002 Tableless Web Design

2005 Ajax

2009 HTML 5



HTML5 and Browser

HTML5 \sim HTML + CSS + JS

- HTML5?
- CSS3?
- JavaScript? ECMAScript?

HTML5

CSS3

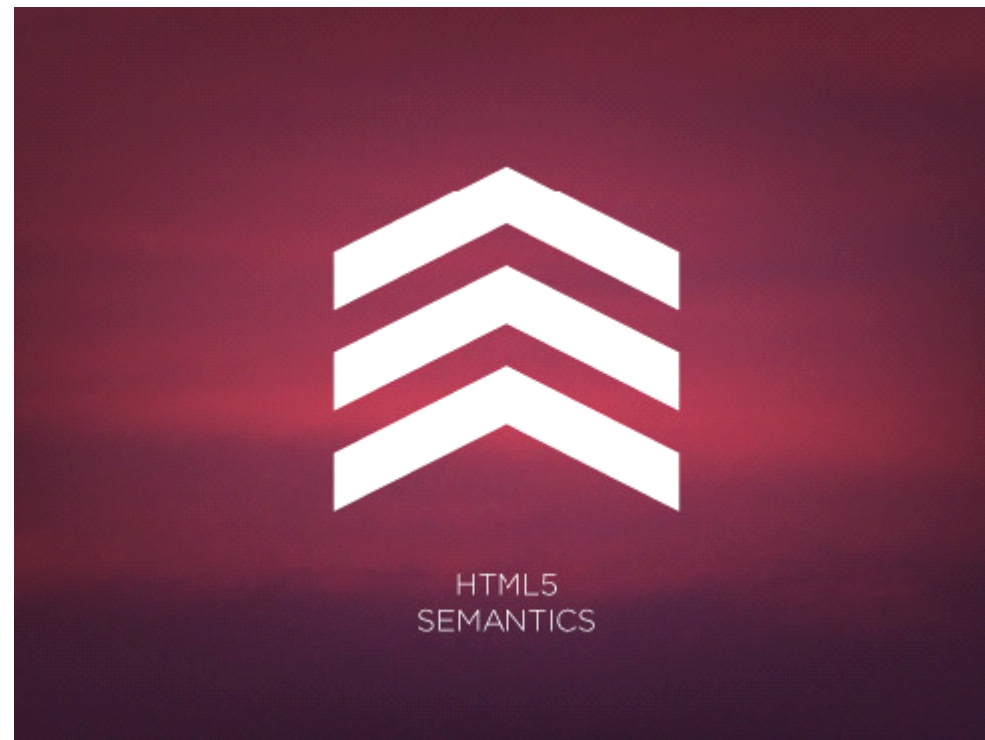
JavaScript





HTML5 and Browser

Semantics



`<section>`, `<article>`, `<nav>`, `<header>`, `<footer>`, `<aside>`, `<hgroup>`, `<mark>`,
`<figure>`, `<figcaption>`



HTML5 and Browser

Offline & Storage



AppCache, Local Storage, Web SQL & Indexed DB, File API, Online/Offline Events



HTML5 and Browser

Device Access

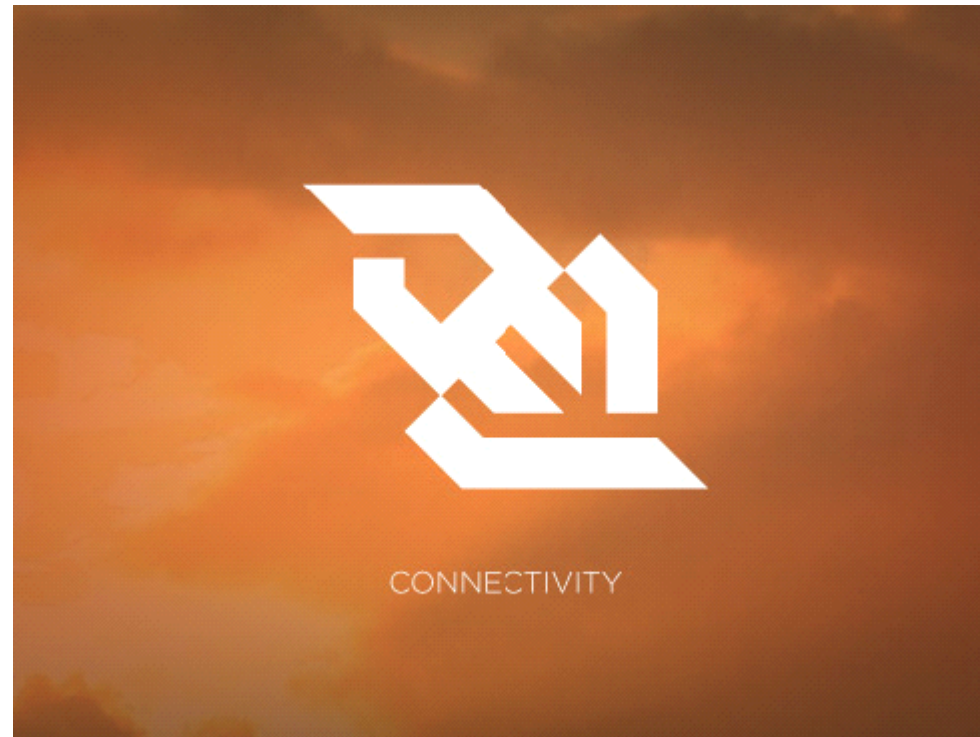


Geolocation API, from Audio/Video input access to Microphones and Cameras



HTML5 and Browser

Connectivity



Web Sockets, Server-Sent Events, be used for Chats, Games, Communication.



HTML5 and Browser

Multimedia

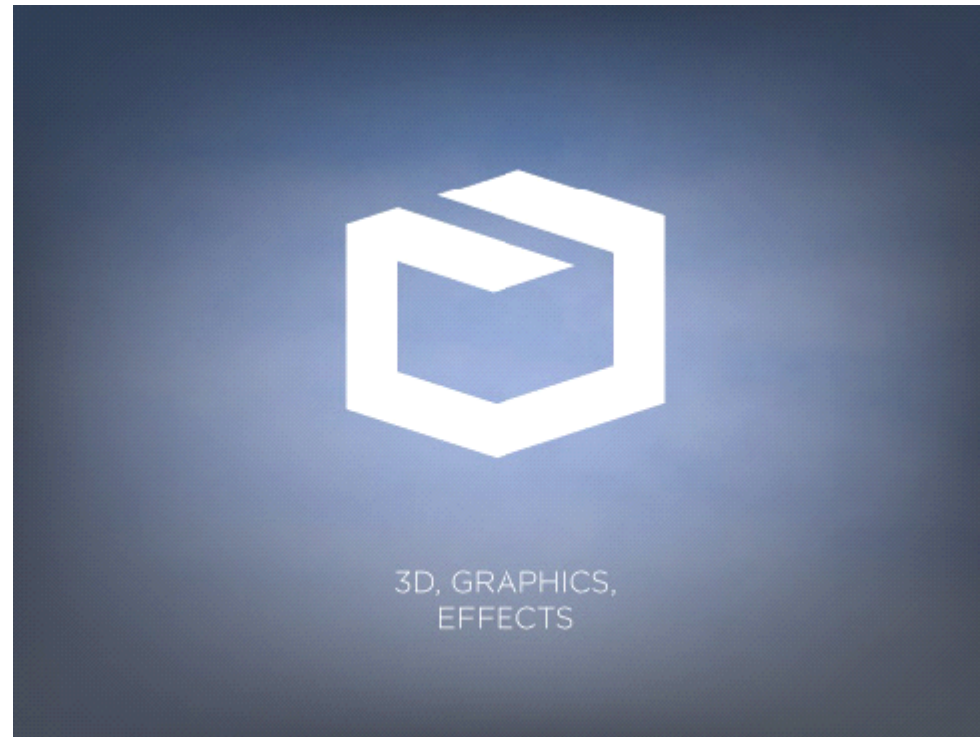


Audio and video



HTML5 and Browser

3D, Graphics & Effects

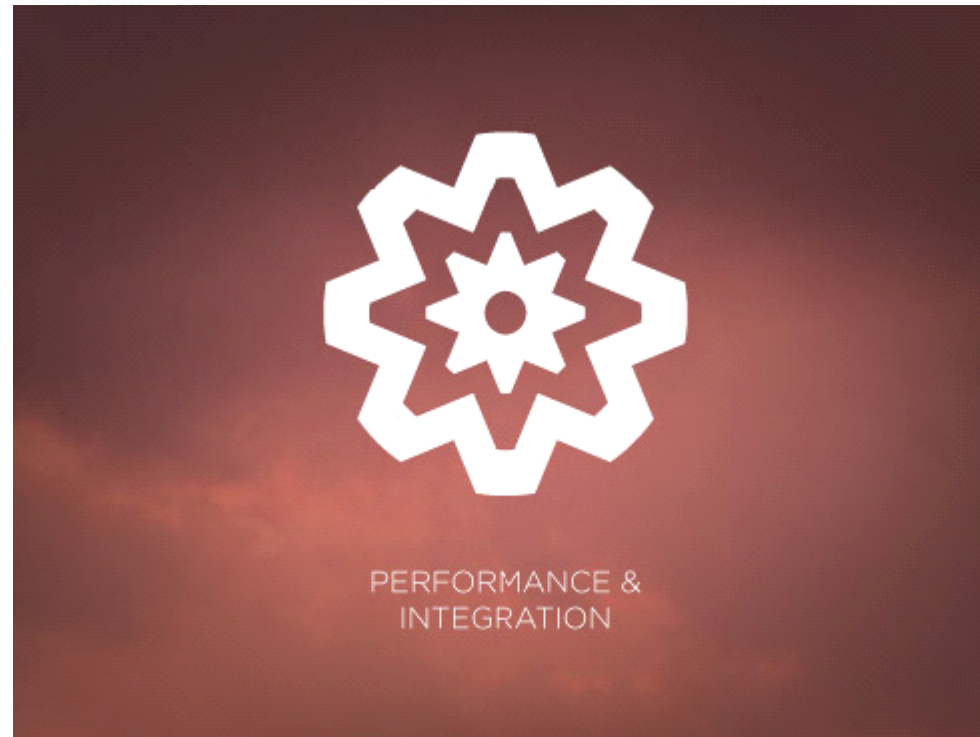


SVG, Canvas, WebGL, and CSS3 3D



HTML5 and Browser

Performance & Integration

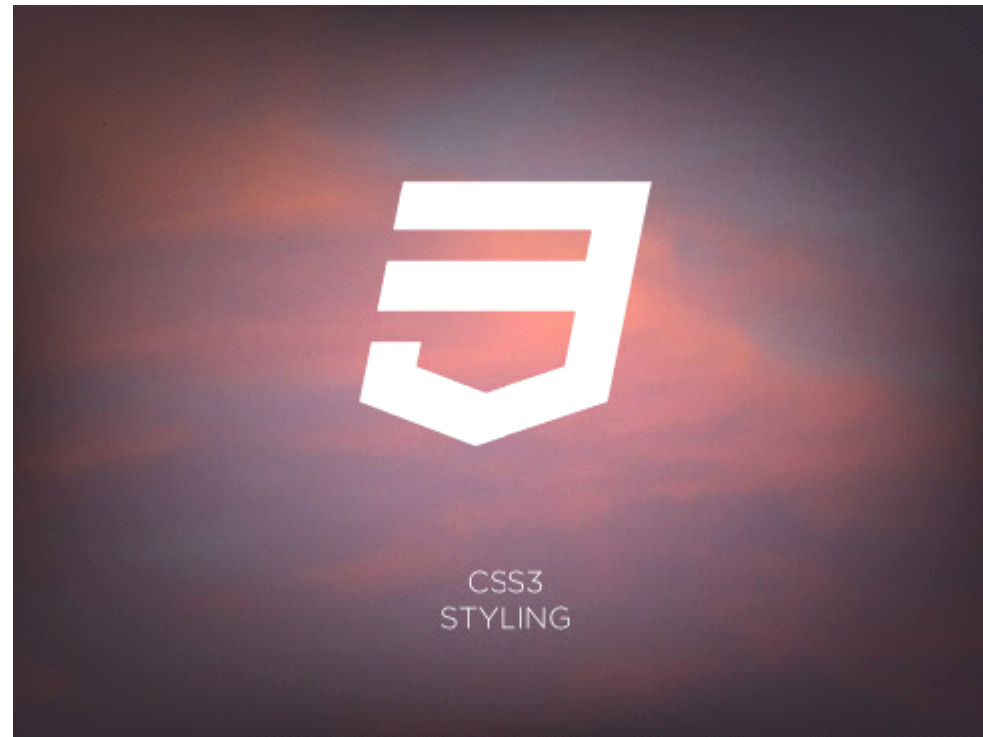


Web Workers, XMLHttpRequest(XHR), WebSocket, CSS3 Transitions



HTML5 and Browser

CSS3



CSS 3D Transforms, CSS3 Colors, CSS3 Animation ...



HTML5 and Browser

HTML 更好的语义标签

`<section>`, `<article>`, `<aside>`, `<footer>`, `<header>`, `<hgroup>`, `<figure>`, `<figcaption>`,
`<nav>` 等标签

```
<section>
<h1>HTML5</h1>
<section>
  <h2>Introduction</h2>
  <p>In this section, we discuss HTML5
</section>
<section>
  <h2>Specification</h2>
  <p>http://dev.w3.org/html5/
</section>
<aside>
  <p>http://whatwg.org
</aside>
</section>
<footer>
  <p>(c) 2011 Huihoo.com
</footer>
```



HTML 应用标签

```
<meter min="0" max="100" low="40" high="90" optimum="100"
value="91">A+</meter>
```

```
<progress>Downloading...</progress>
```

```
<progress value="75" max="100">3/4 complete</progress>
```



HTML 新的Form类型

```
<input type="text" required />
```

```
<input type="email" value="ihuihoo@gmail.com" />
```

```
<input type="date" min="2010-08-14" max="2011-08-14" value="2010-08-14"/>
```

```
<input type="range" min="0" max="50" value="10" />
```

```
<input type="search" results="10" placeholder="Search..." />
```

```
<input type="tel" placeholder="(555) 555-5555"  
      pattern="^(?\\d{3}\\)?[-\\s]\\d{3}[-\\s]\\d{4}.*?$" />
```

```
<input type="color" placeholder="e.g. #bbbbbb" />
```

```
<input type="number" step="1" min="-5" max="10" value="0" />
```




HTML 内置SVG

```
<html>
  <svg>
    <circle id="myCircle" class="important" cx="50%" cy="50%" r="100"
      fill="url(#myGradient)"
      onmousedown="alert('Hello SVG!');"/>
  </svg>
</html>
```



HTML5 and Browser

CSS3

Borders

- border-color
- border-image
- border-radius
- box-shadow

Backgrounds

- background-origin and background-clip
- background-size
- multiple backgrounds

Color

- HSL colors
- HSLA colors
- opacity
- RGBA colors

Text effects

- text-shadow
- text-overflow
- word-wrap

User-interface

- box-sizing
- resize
- outline
- nav-top, nav-right, nav-bottom, nav-left

Selectors

- attribute selectors



HTML5 and Browser

CSS3

Basic box model

overflow-x, overflow-y

Generated Content

content

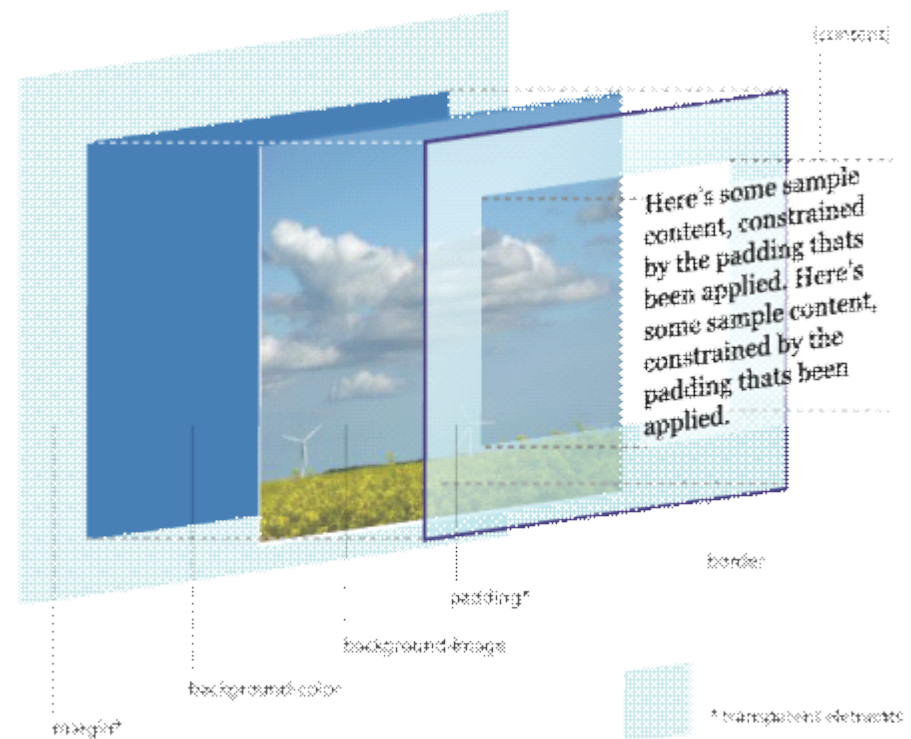
Other modules

media queries

multi-column layout

Web fonts

speech





HTML5 and Browser

实时通信

主要体现在以下几个方面:

Web Workers

WebSocket

Notifications



Web Workers

Web Workers: 该API为Web应用提供了后台处理能力。

演示: <http://html5demos.com/worker>

规范: <http://dev.w3.org/html5/workers/>



WebSocket

WebSockets 通过单个TCP套接字在Web之上定义了一个双向全双工传输的通信通道。

演示: <http://html5demos.com/web-socket>

规范: <http://dev.w3.org/html5/websockets/>



Notifications

Notifications 将 Web 带入实时世界

```
var notification = new Notification("calendar.png", "Meeting about to begin",  
"Room 101");  
notification.onclose = function() { cancelReminders(event); }  
notification.show();
```

规范: <http://www.w3.org/TR/notifications/>



HTML5 and Browser

与操作系统的集成

主要体现在以下几个方面：

Drag & Drop

File API

Geolocation



HTML5 and Browser

Drag & Drop

支持文件拖放功能

演示: <http://html5demos.com/drag>

规范: <http://dev.w3.org/html5/spec/dnd.html>



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File API

支持文件拖放上传等功能

演示: <http://html5demos.com/file-api>

规范: <http://www.w3.org/TR/FileAPI/>



Geolocation

通过Wi-Fi基站和GPS获取定位信息会更准确，也可通过IP地址等信息获得。

演示: <http://demo.huihoo.com/html5/geolocation.html>

规范: <http://www.w3.org/TR/geolocation-API/>



<http://huihoo.com>

HTML5: Web下一波



HTML5 and Browser





浏览器

支持 HTML5 标准的主流浏览器:

Firefox 4

Chrome 10

Opera 11

Safari 5

IE 9



HTML5 and Browser

火狐 Firefox



Firefox不仅仅只是一款浏览器 ...



关于Firefox 4

- * 对HTML5规范更广泛的支持;
- * 采用了全新的JägerMonkey JavaScript脚本引擎，性能的大幅提升;
- * 全新的用户界面，让操作更加平滑、简单;
- * 功能强大的Sync（同步）功能;
- * 通过标签组，您可以更好的关注在某一类网页内容和应用上;
- * 提供了全新的扩展管理器，更容易的管理火狐扩展，更容易寻找和安装新扩展;

.....

更多、更酷的特性就等你自己体验了。



HTML5体验

先看一些简单的HTML5的例子：

<http://demo.huihoo.com/html5>

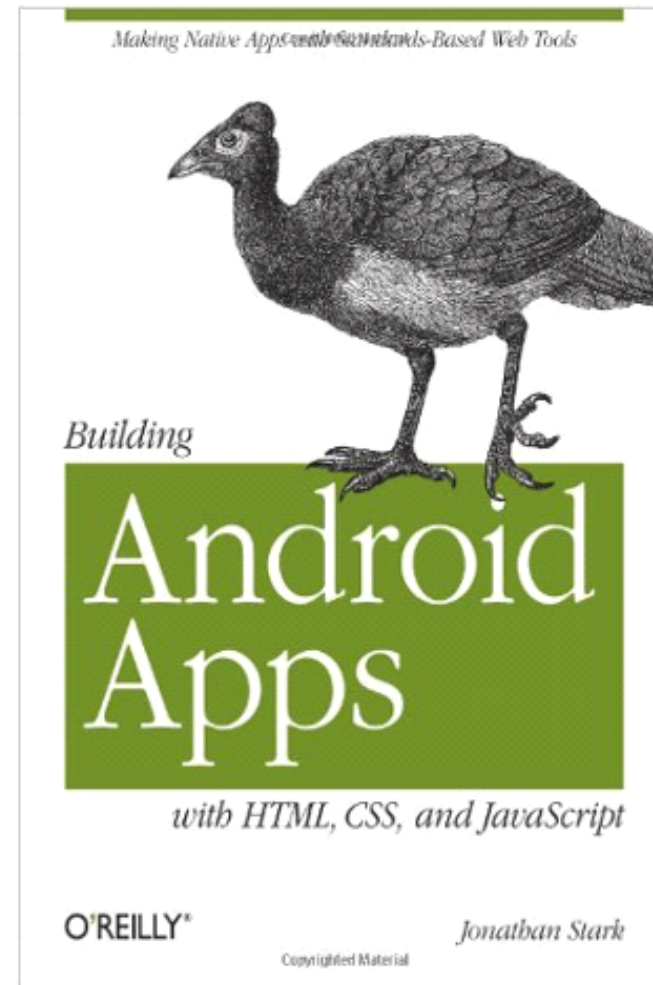
还有很多站点提供了HTML5的精彩在线体验





HTML5 and Browser

HTML5 and Mobile





HTML5 and Browser

Flash

- Adobe在做更多的开放
- Adobe在其工具中加入对HTML5的更多支持
- 对我们来说，可从Flash身上学到很多
- 不要将HTML5和Flash完全对立起来
- 融合、共存HTML5和Flash或许能为企业带来最大价值
- ...



HTML5 and Browser

Flash和HTML5





HTML5视频和Flash视频

```
<video>
```

```
<source src="movie.mp4">
```

```
<source src="movie.ogv">
```

```
<object data="movie.swf">
```

```
<a href="movie.mp4">download</a>
```

```
</object>
```

```
</video>
```

让HTML5的视频与Flash的视频协同起来



<http://huihoo.com>

HTML5: Web下一波



HTML5 and Browser

Thank You!