



Frische Webtechniken

Praktische HTML5-
und CSS3-Beispiele

Eric Eggert aka. @yatil – A-Tag 2010 – Wien

Ich bin **Eric Eggert**, @yatil.

ericeggert.de

yatil.de

HTML5?

1991 HTML Tags

1995 HTML 2.0

1997 HTML 3.2

1997 HTML 4.0

1999 HTML 4.01

2000 XHTML 1

2001 XHTML 1.1

? XHTML 2

2009 HTML5

Designprinzipien

XHTML 2.0

As **generic XML** as possible: if a facility exists in XML, try to use that rather than duplicating it.

More usability: within the constraints of XML, try to make the language easy to write, and make the resulting documents easy to use.

XHTML 2 Design Aims

HTML5

This document describes the set of guiding principles used by the HTML Working Group for the development of HTML5. The principles offer guidance for the design of HTML in the areas of **compatibility**, **utility** and **interoperability**.

In case of conflict, consider **users** over **authors** over **implementors** over **specifiers** over **theoretical purity**.

HTML Design Principles

HTML5 ist ein Verbund vieler unterschiedlicher Techniken:

HTML5 ≈ HTML + JS APIs

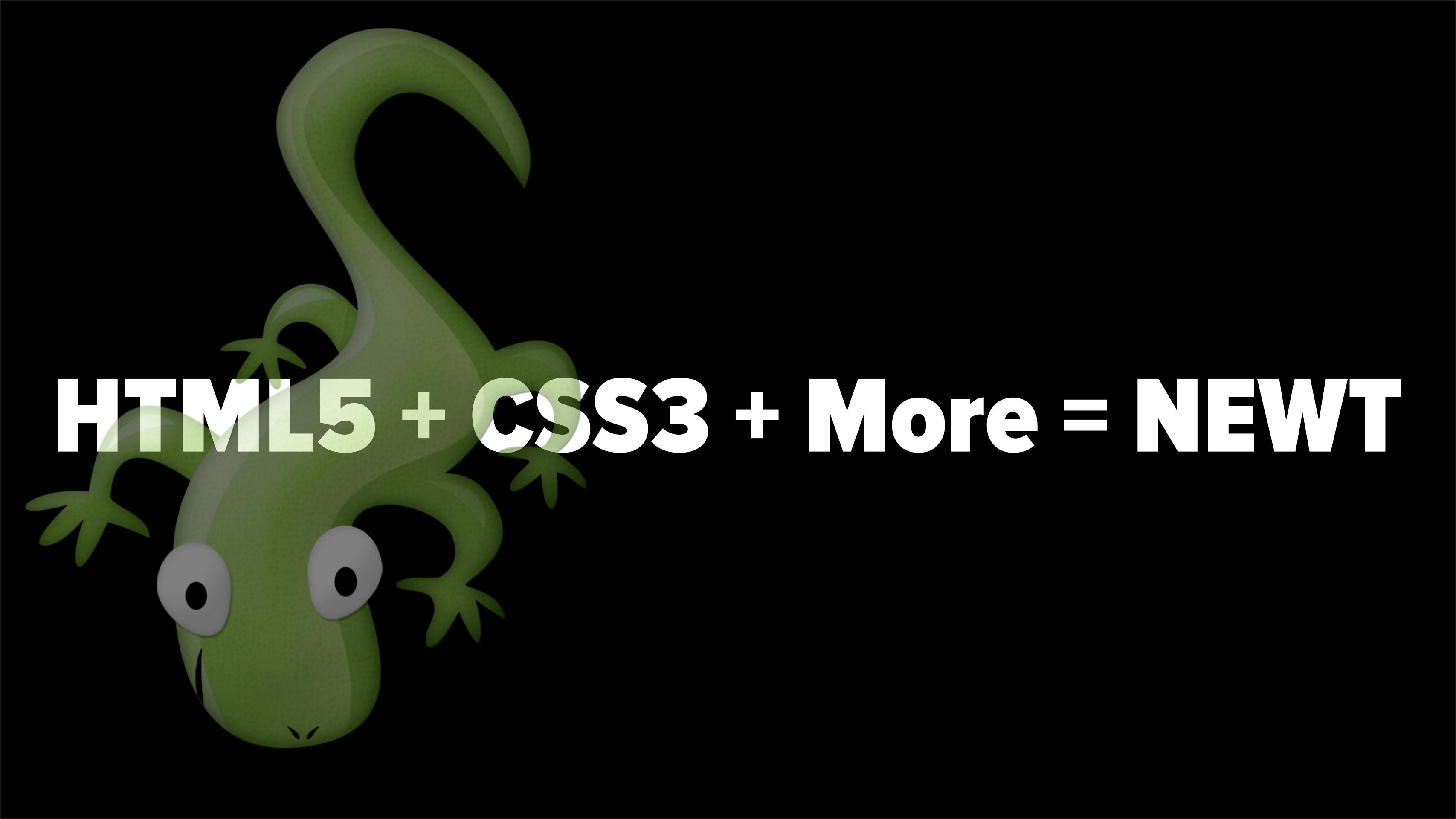
CSS3?

CSS3 ist eine Sammlung von vielen unterschiedlichen Modulen:

CSS3 ≈ Selectors + Media Queries +
Multi Column Layout + Backgrounds &
Borders + Color + Fonts + 2D Transformations
+ 3D Transformations + Transitions +
Animations

HTML5 und CSS3 sind
keine abgeschlossenen Spezifikationen.

**Die Implementation in Browsern
ist noch lückenhaft.**



HTML5 + CSS3 + More = NEWT



HTML5 + CSS3 + More = NEWT

SVG, XHR2, Geolocation,
web Sockets, WOFF, Web DB,
IndexedDB, WebGL

HTML5 Praxisbeispiele

Markup

- article
- section
- aside
- nav
- header
- footer
- details
- figure

Internet Explorer < 9: html5shiv

```
<!--[if lt IE 9]>
<script
  src="http://html5shiv.googlecode.com/
    svn/trunk/html5.js">
</script>
<![endif]-->
```

Ist HTML5 barrierefrei?

HTML5accessibility.com

HTML5 accessibility

a work in progress:
October 2010

- Also on this site: [HTML5 accessibility support work arounds](#).
- Elsewhere
 - French version: [L'accessibilité d'HTML5](#)
 - Italian version: [Accessibilità di HTML5](#)

This site is a resource to provide information about which [HTML5](#) user interface features are accessibility supported in browsers, making them usable by people who rely upon assistive technology (AT) to use the web.

It is not intended to dissuade developers from using [HTML5](#) features. Sometimes there are better choices, sometimes developers have to add a little extra to make the feature useful or usable, and other times features have simply not been implemented by any browser or only by browsers that do not yet support assistive technologies. As a consequence it may not yet be practical to use a particular [HTML5](#) feature. Example [work arounds](#) for lack of implementation or lack of accessible implementation are linked from the [Solutions page](#).

The information in the support table will be updated on a monthly basis, to keep up with support improvements made in browsers as new versions are released.

Use and [support NVDA](#) the open source screen reader for Windows.

HTML5accessibility.com [developed by TPG](#) your accessibility partner.

HTML5 ist **mindestens** so
barrierefrei wie HTML 4.01.

accessifyhtml5.js

```
$(document).ready(function() {
  var fixes = {
    'header.site': { 'role' : 'banner' },
    'footer.site': { 'role' : 'contentinfo' },
    'article' : { 'role' : 'article' },
    'aside' : { 'role' : 'complementary' },
    'nav' : { 'role' : 'navigation' },
    'output' : { 'aria-live': 'polite' },
    'section' : { 'role' : 'region' }
  };
  $.each(fixes, function(index, item) {
    $(index).attr(item);
  });
});
```

ya.tt/accessifyhtml5

Struktur-Algorithmus

```
<section>
  <h1>News</h1>
  <article>
    <h1>Neuigkeit 1</h1>
    <p>Lorem ipsum</p>
    <footer>
      <h1>Autor</h1>
      <p>Max Mustermann</p>
    </footer>
  </article>
  <article>
    <h1>Neuigkeit 2</h1>
    <p>Lorem ipsum</p>
    <footer>
      <h1>Autor</h1>
      <p>Max Mustermann</p>
    </footer>
  </article>
</section>
```

```
<section>
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  <article>
    <h1>Neuigkeit 1</h1>
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  </article>
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    <p>Lorem ipsum</p>
    <footer>
      <h1>Autor</h1>
      <p>Max Mustermann</p>
    </footer>
  </article>
</section>
```

- h1 News
- h2 Neuigkeit 1
- h3 Autor
- h2 Neuigkeit 2
- h3 Autor

HTML5 <audio>

```
<audio controls preload="auto">  
  <source src="audio.mp3" />  
  <source src="audio.oga" />  
  <a href="audio.mp3">MP3 herunterladen</a>  
</audio>
```

- **controls** Kontrollelemente?
 - **loop** Wiederholen?
 - **autoplay** Losspielen?
 - **preload** Vorladen?
- Werte: **none**, **metadata**, **auto**

Browser	OGG	MP3	WAV
Firefox 3.6+	✓		✓
Safari 5+		✓	✓
Chrome 6+	✓	✓	
Opera 10.5+	✓		✓
Internet Explorer 9+		✓	✓

Browserunterstützung ✓

Für den IE < 9 (und andere): Flash-Fallback mit HTML-Kontrollelementen

Death of a Dodo



HTML5 <video>

```
<video poster="still.png" preload="none" controls>
<source src="video.mp4" type="video/mp4" />
<source src="video.ogv" type="video/ogg" />
<a class="source" href="video.mp4">
    Download MP4
</a>
</video>
```

jMediaelement

[http://www.protofunc.com/jme/
demos/player-captions.html](http://www.protofunc.com/jme/demos/player-captions.html)

Untertitelung

1

00:00:1,000 --> 00:00:5,951

This is a simple example
for srt captions

2

00:00:7,166 --> 00:00:15,883

Simply use a srt-file and append:

My srt file;

3

00:00:16,000 --> 00:00:18,962

... to your media element

4

00:00:21,999 --> 00:00:24,368

There are more options, we will explain soon.

5

00:00:24,999 --> 00:00:31,368

Try to be accessible and nice to your users :-)

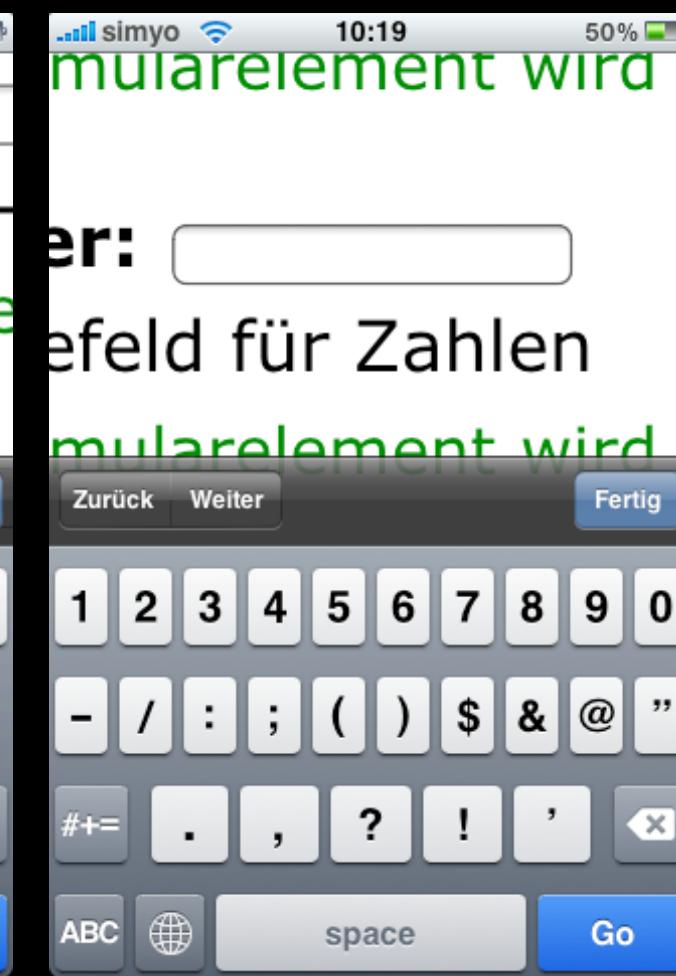
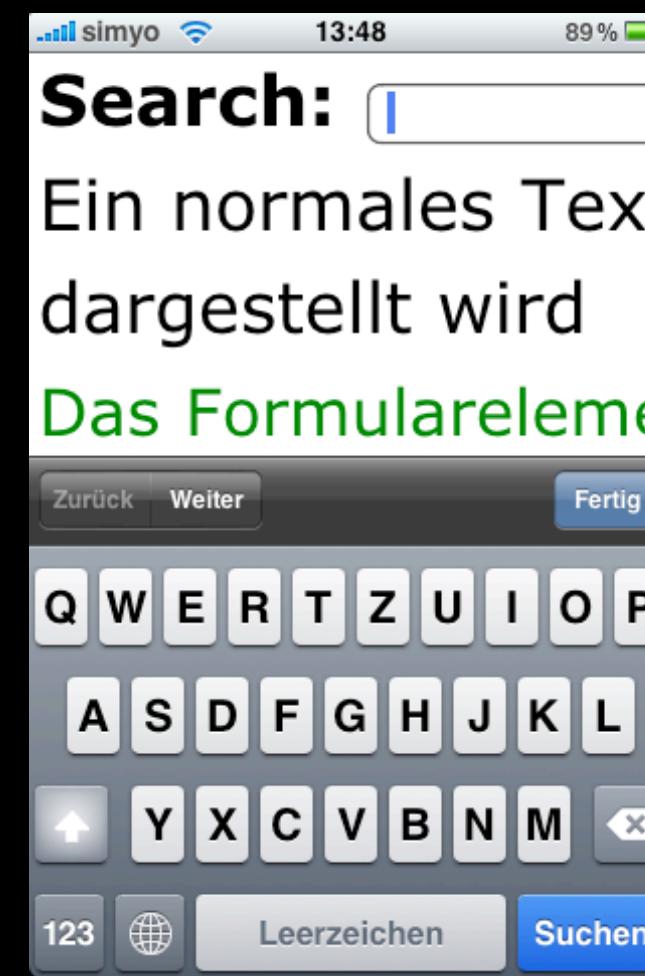
Canvas

Canvas ist ein **schwarzes Loch** in
Sachen Barrierefreiheit.

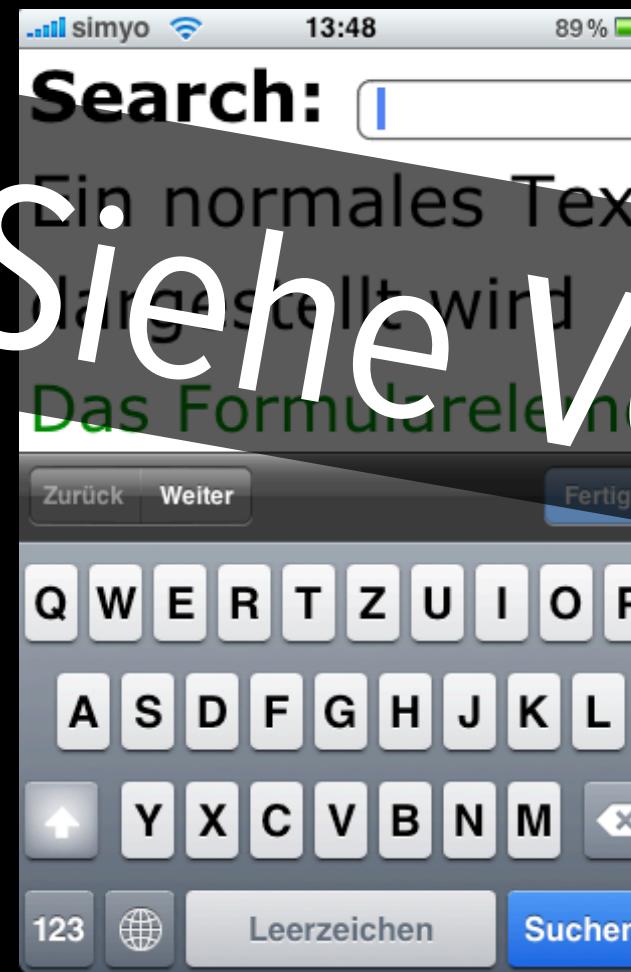
Shadow DOM

IE: exCanvas & CanvasText

Neue Formularelemente



Siehe Vortrag von Peter Minarik



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    'nav' : { 'role' : 'navigation' },
    'output' : { 'aria-live': 'polite' },
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    'output' : { 'aria-live': 'polite' },
    'section' : { 'role' : 'region' },
    '[required]' : { 'aria-required': 'true' }
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CSS-Demos

@font-face

Einbindung von Schriftarten, die
nicht auf dem Computer des Besuchers
installiert sind.

Rounded Corners
Gradients
Box Shadow

Animationen:
Transforms
Transitions
Animation



Danke

für Ihre Aufmerksamkeit

Twitter: @yatil