

Web Accessibility Fundamentals

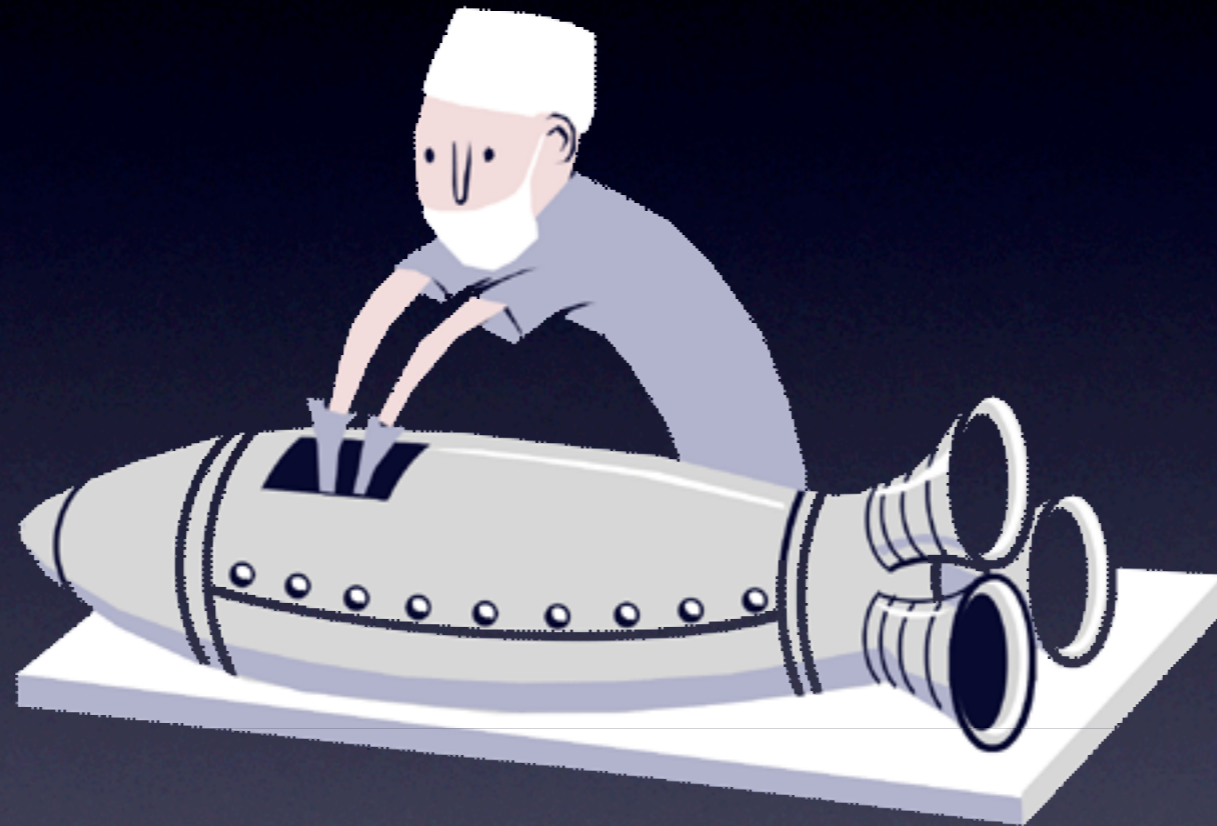
Jared Smith
<http://webaim.org>



What is Accessibility?

8.5% of the population has a disability that affects computer use

Web Accessibility



... it's not rocket surgery!

... but don't bite off more than you can chew.



The Evolution of Web Accessibility Guidelines

- WCAG 1.0 (1999)
- Section 508 of the Rehabilitation Act (2001)
- WCAG 2.0 (2008)

P

O

U

R

Perceivable

Operable

Understandable

Robust

Ensure POUR content across disability types

- ✓ Vision - blind, low-vision, color-blind
- ✓ Deaf and Hard-of-hearing
- ✓ Motor
- ✓ Cognitive
- ✓ Seizure

Perceivable - Auditory Disabilities

- Captioning for video
- Text transcripts

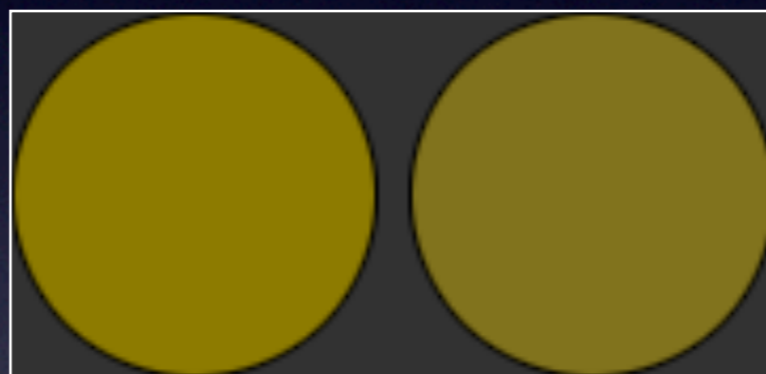
Perceivable - Visual Disabilities

- Use meaningful links. Avoid “click here”.
- Alternative text for non-text elements
- Sufficient contrast - <http://webaim.org/resources/contrastchecker/>
- Ensure that meaning is not conveyed with color alone

You've won the lottery! Press the GREEN button to accept your prize and the RED button to decline.



You've won the lottery! Press the GREEN button to accept your prize and the RED button to decline.



The **green** mushrooms listed here are OK to eat. The **red** mushrooms will kill you.

- Amanita
- Chanterelle
- Porcini
- Shitake
- Tylopilus

<http://colorfilter.wickline.org/>

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<http://colorfilter.wickline.org/>

Vitally Important Text

vs.

Vitally Important Text

Secret of Everlasting Happiness

Secret of Everlasting Happiness

Please finish reading this text
– it will give you the secret to
everlasting happiness. The secret
is simple, all you need to do is to stop
worrying about the key to everlasting
happiness and enjoy the moment.

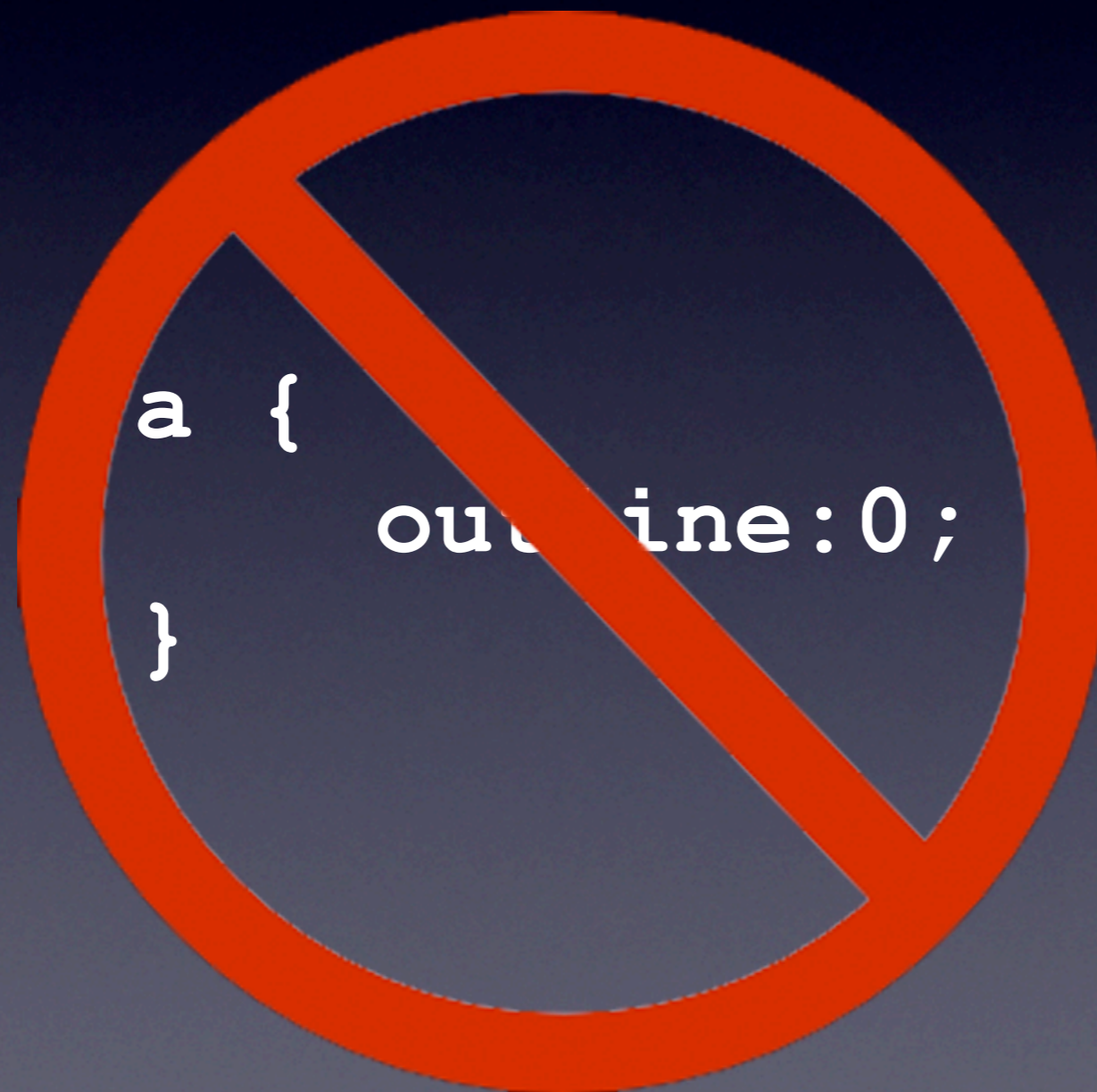
Secret of Everlasting Happiness

Sorry! Time's up!
Better luck next time!

Don't remove the focus indicator
from focused/hovered links.

```
a {  
    outline: 0;  
}
```

Don't remove the focus indicator from focused/hovered links.



Don't remove the focus indicator from focused/hovered links.



Don't remove the focus indicator from focused/hovered links.

```
a {  
    outline:0;  
}  
a:hover, a:focus {  
    outline:1px;  
    background:#ff0;  
    text-decoration:underline;  
}
```

Visually hiding content

- `display:none` and `visibility:hidden` hide from everyone
- Position off-screen left with CSS for screen readers
- Use judiciously

Build bulletproof designs

What if users ...

- ... increase text size.
- ... can't use a mouse.
- ... disable javascript.



What is **equivalent** alt text?

What is **equivalent** alt text?

CONTENT and **FUNCTION**.
VERY RARELY Description.

Alternative Text

should...

- Be accurate and equivalent.
- Be succinct.
- NOT be redundant.
- NOT use the phrases "image of ..." or "graphic of ..." to describe the image.



```
<img alt="A very mad black and yellow  
hornet hovers with a threatening  
stinger" />
```

OR

```
<img alt="Damascus High School Hornet" />
```

alt="bullet"

Don't add alt text to decorative images



`alt=""`



alt="smiling lady"???

Images that are the only thing
within a link must **ALWAYS**
have alternative text

... and image map hot-spots and image buttons too.

Provide a good document heading structure

Headings provide semantics, enhance navigation, and add 'hooks' for styling and visual design.

Form Labels

```
<label for="firstname">First Name:</label>  
  <input type="text" id="firstname"  
    name="firstname" />
```

First Name:

Text boxes, text areas, select menus,
checkboxes, and radio buttons.

Fieldset and Legend for checkboxes and radio buttons

```
<fieldset>
```

```
<legend>Is this question ambiguous?</legend>
```

```
<label for="yes">Yes</label>
```

```
<input type="radio" name="amb" id="yes" value="Yes" />
```

```
<br />
```

```
<label for="no">No</label>
```

```
<input type="radio" name="amb" id="no" value="No" />
```

```
</fieldset>
```

Is this question ambiguous?

Yes

No

Table Headers

Class Schedule

| Class Name | Course Number | Location |
|------------------------------|---------------|----------|
| Advanced Website Development | BIS 5650 | B105 |
| Database Management | BIS 3330 | B220 |

Table Headers

```
<table>
<caption>Class Schedule</caption>
<tr>
  <th scope="col">Class Name</th>
  <th scope="col">Course Number</th>
  <th scope="col">Location</th>
</tr>
<tr>
  <th scope="row">Advanced Website
Development</th>
  <td>BIS 5650</td>
  <td>B105</td>
</tr>
<tr>.....
```

Table Headers

Class Schedule

| Class Name | Course Number | Location |
|------------------------------|---------------|----------|
| Advanced Website Development | BIS 5650 | B105 |
| Database Management | BIS 3330 | B220 |

“Even if a website is **highly usable** and provides very **useful information** presented in a logical arrangement, this may **fail to impress** a user whose **first impression** of the site was negative.”

Dr. Gitte Lindgaard
Carleton University



Visual design is a
important aspect of
web accessibility!!1!





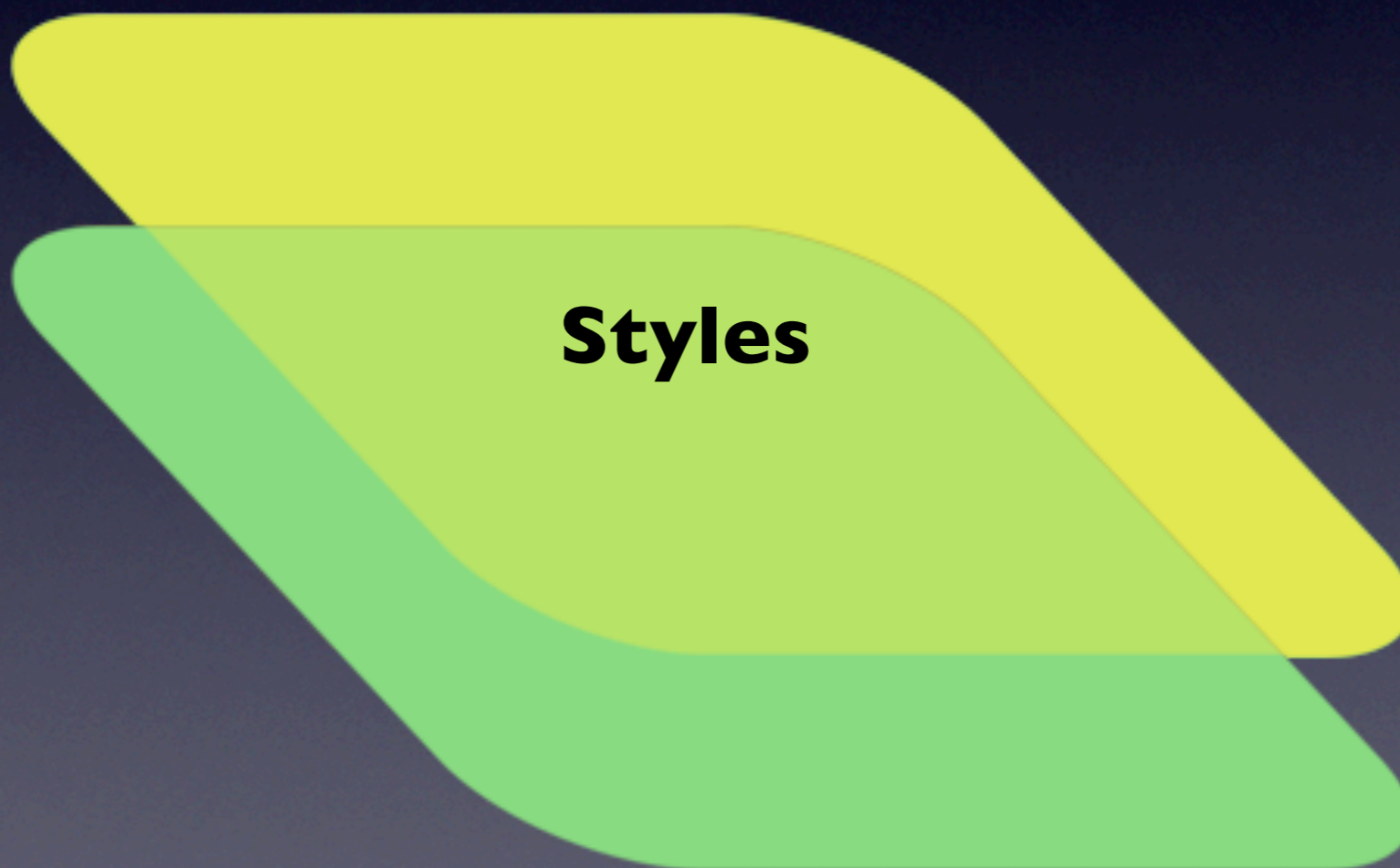
The length of your instructional text is almost always inversely proportionate to the usability of your product.

Content and Structure



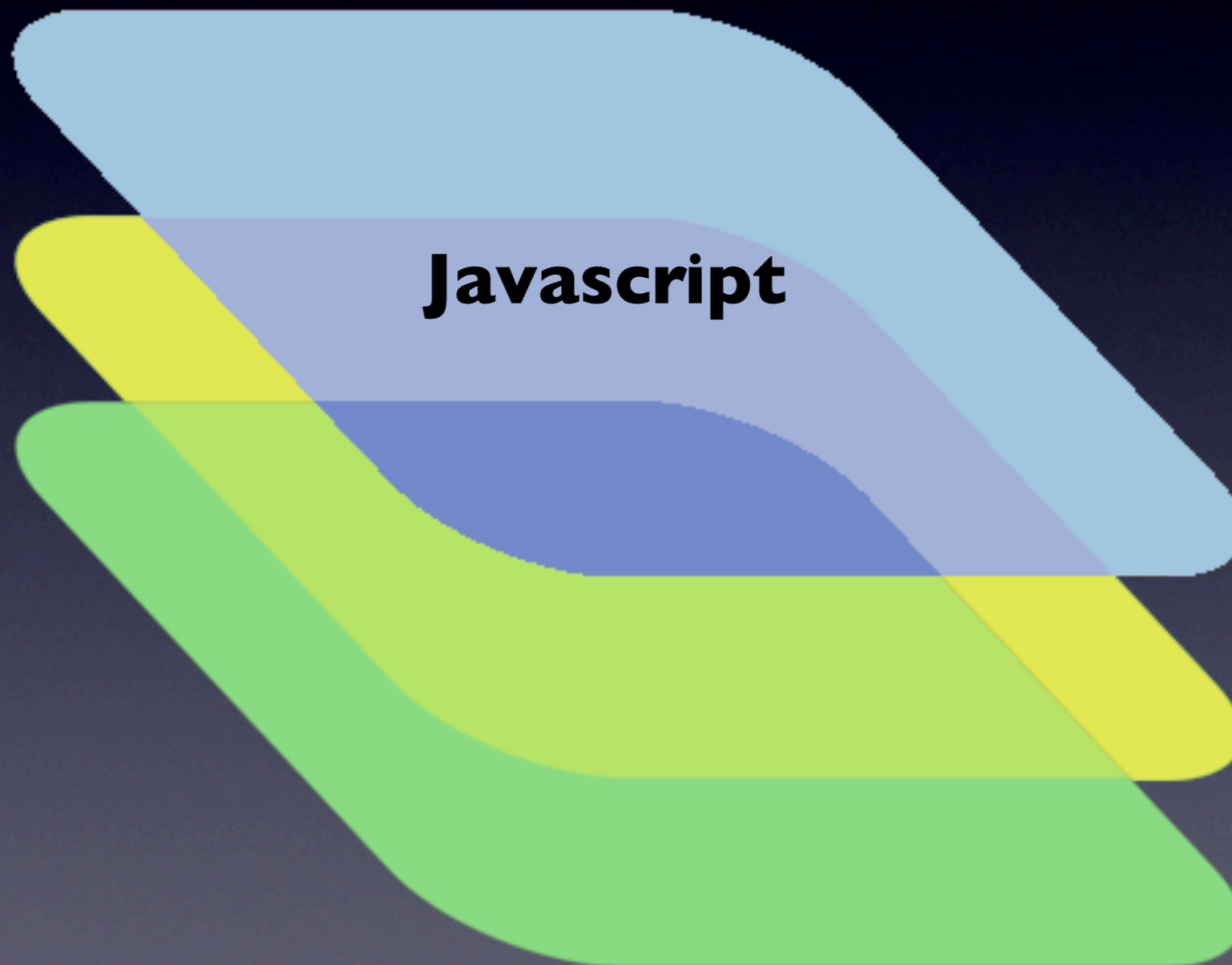
HTML

Presentation



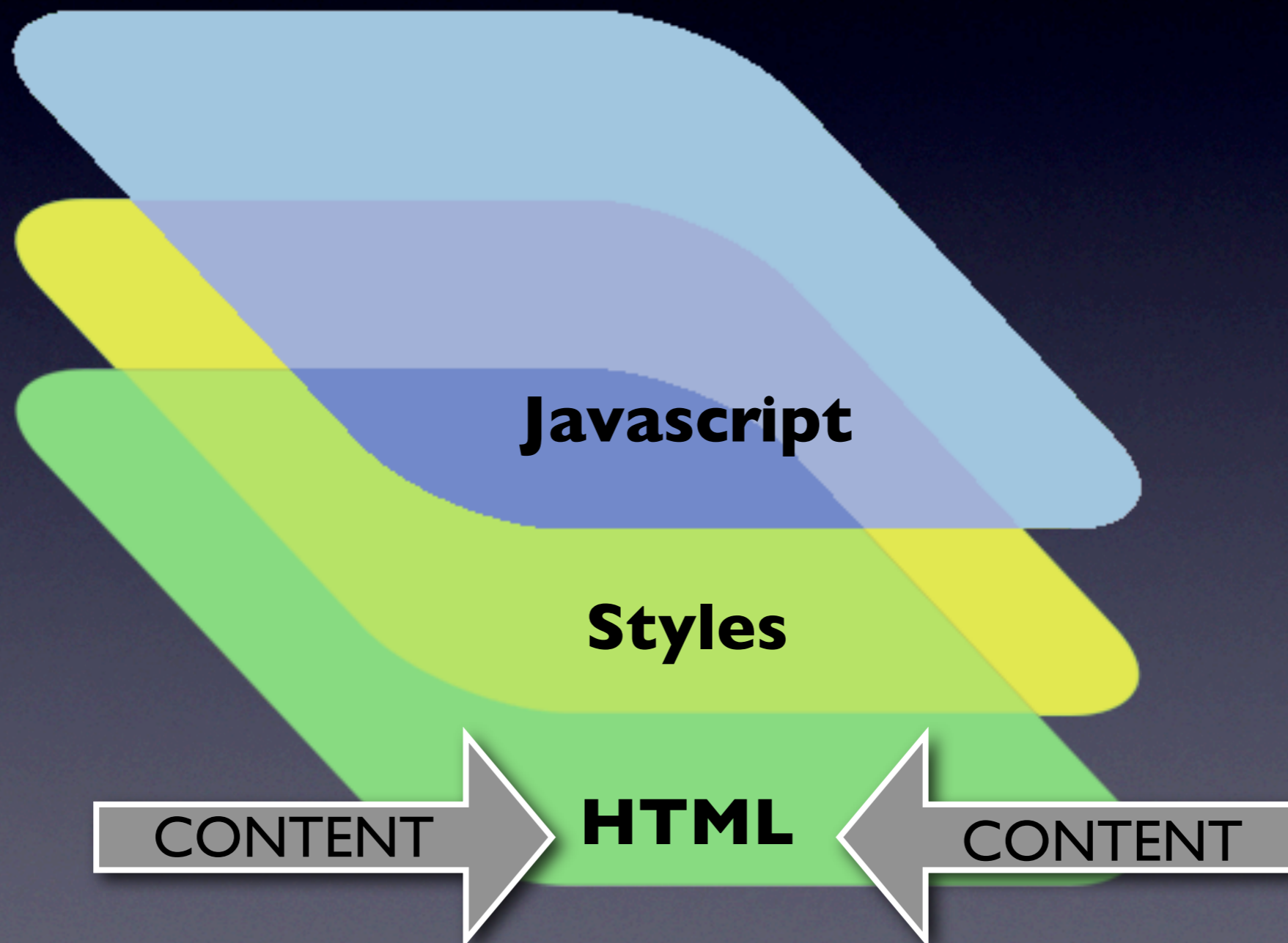
Styles

Behavior

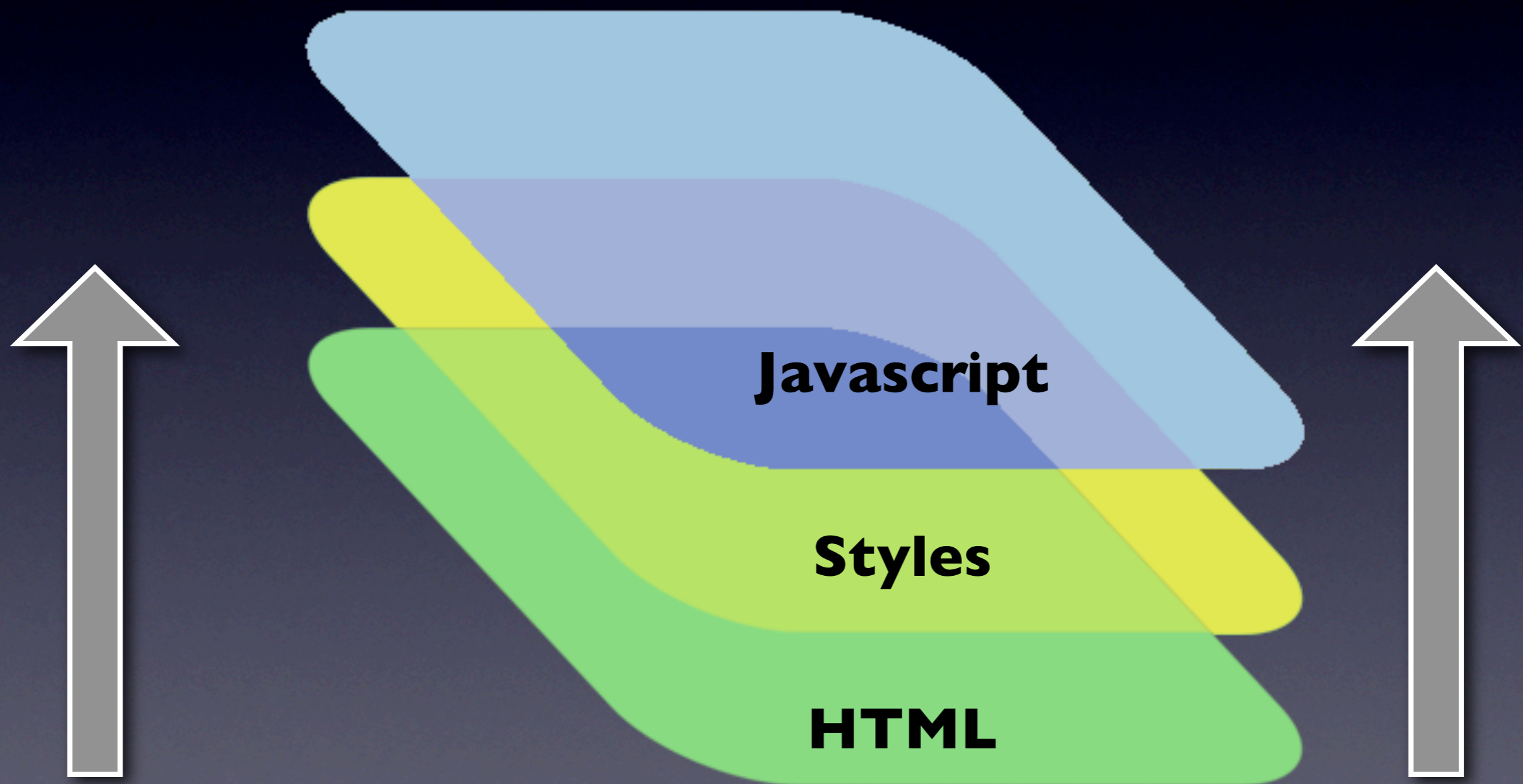


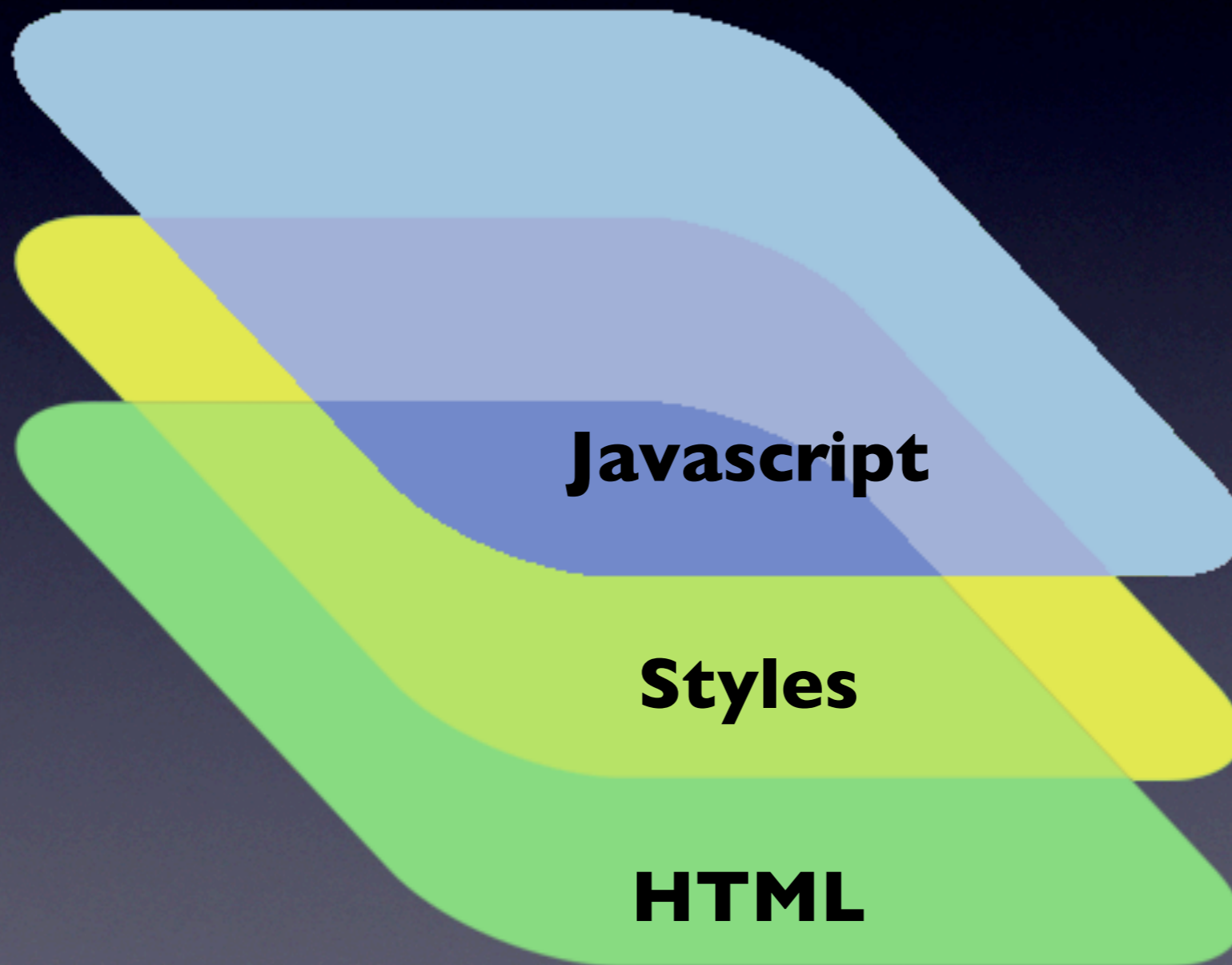
Javascript

Technology should enhance content



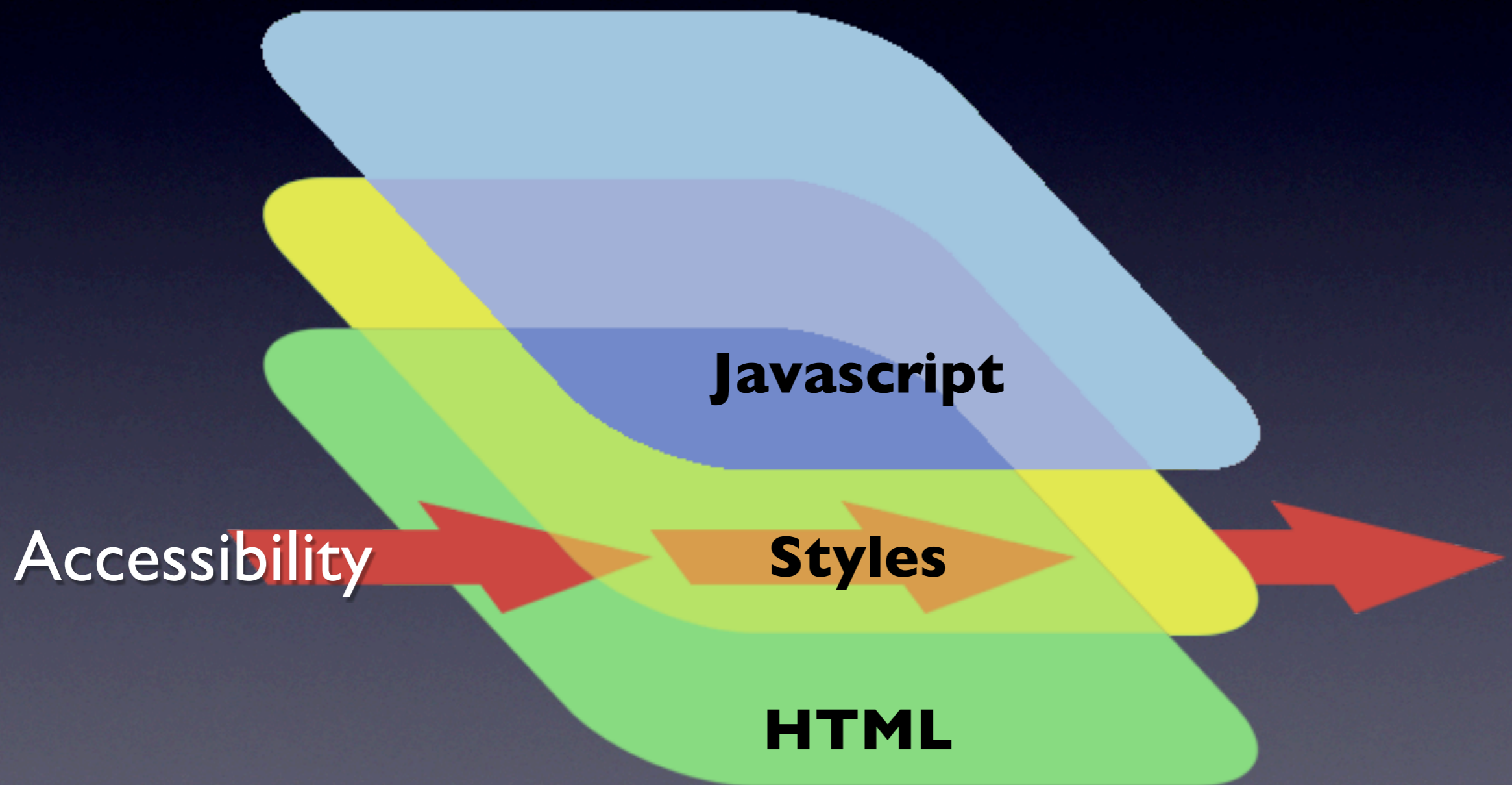
Progressive Enhancement



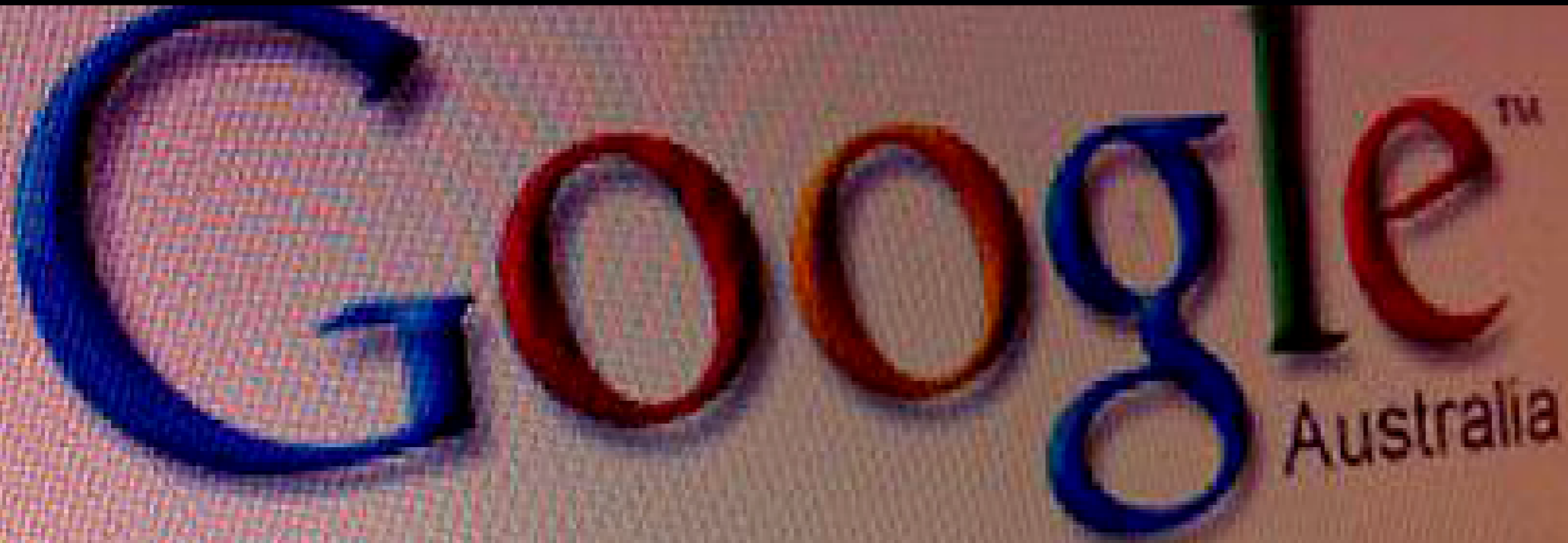


Graceful Degradation

Progressive Enhancement



Search Engines are blind

The image shows the Google logo in its multi-colored font (blue, red, yellow, blue, green, red) with a trademark symbol. Below the logo, the word "Australia" is written in a simple black font. The background is a light, textured surface.

Google™
Australia

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ARIA

Accessible Rich Internet Applications

A W3C specification for making dynamic content, complex interactions, and other cool things accessible.

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Search Our Site: GO

[Click here](#) to start banking online



Internet Banking Login

Login ID

Password

GO

[Sign Up Now](#) | [Password Reset](#)

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- [GO](#) Get a loan
- [GO](#) Get a mortgage
- [GO](#) Get an insurance quote
- [GO](#) Get an investment account
- [GO](#) Get a credit report

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Apply: For an account or a loan

I'd like to apply for...

Locate: A branch or ATM near you

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Internet Banking Login 

Login ID

Password GO

[Sign Up Now](#) | [Password Reset](#)

[Personal Login](#) [Business Login](#)

 [CLICK HERE](#)

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The image shows a portion of a web form. At the top right, there are two empty text input fields stacked vertically, followed by a button labeled "Submit Query". Below these, on the left side, are two dropdown menus. The first dropdown menu contains the text "I am interested in..." and the second contains "I'd like to apply for...". Underneath the dropdowns are three more empty text input fields, arranged in a staggered, descending layout from left to right.

Separate content/functionality
from visual design



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Expanding the web's potential for people with disabilities

The WebAIM Guide to Web Accessibility

Training everyone in your organization just got A LOT EASIER

[Purchase online now](#)

Getting Started

[Introduction to web accessibility](#)

From the Blog

[Aaron Leventhal Discusses Mozilla Accessibility](#)
October 31, 2006

[Making Firefox Accessible](#)
October 16, 2006

| Training | Evaluation | Design & Delivery |
|---|---|---------------------------------------|
| The WebAIM Guide to Web Accessibility | Site Monitoring & Reporting | Accessibility Repairs |
| Accessibility Training | Accessibility Certification | Web Captioning |
| | Consulting | Accessible Design |

Current Features

Firefox Accessibility

The focus that Mozilla Firefox places on web

Popular Resources

- [HTML & Rich Media Tutorials](#)
- [Video: Web Accessibility In Mind](#)

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WebAIM - Web Accessibility in Mind

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Search

Getting Started

[Introduction to web accessibility](#)

From the Blog

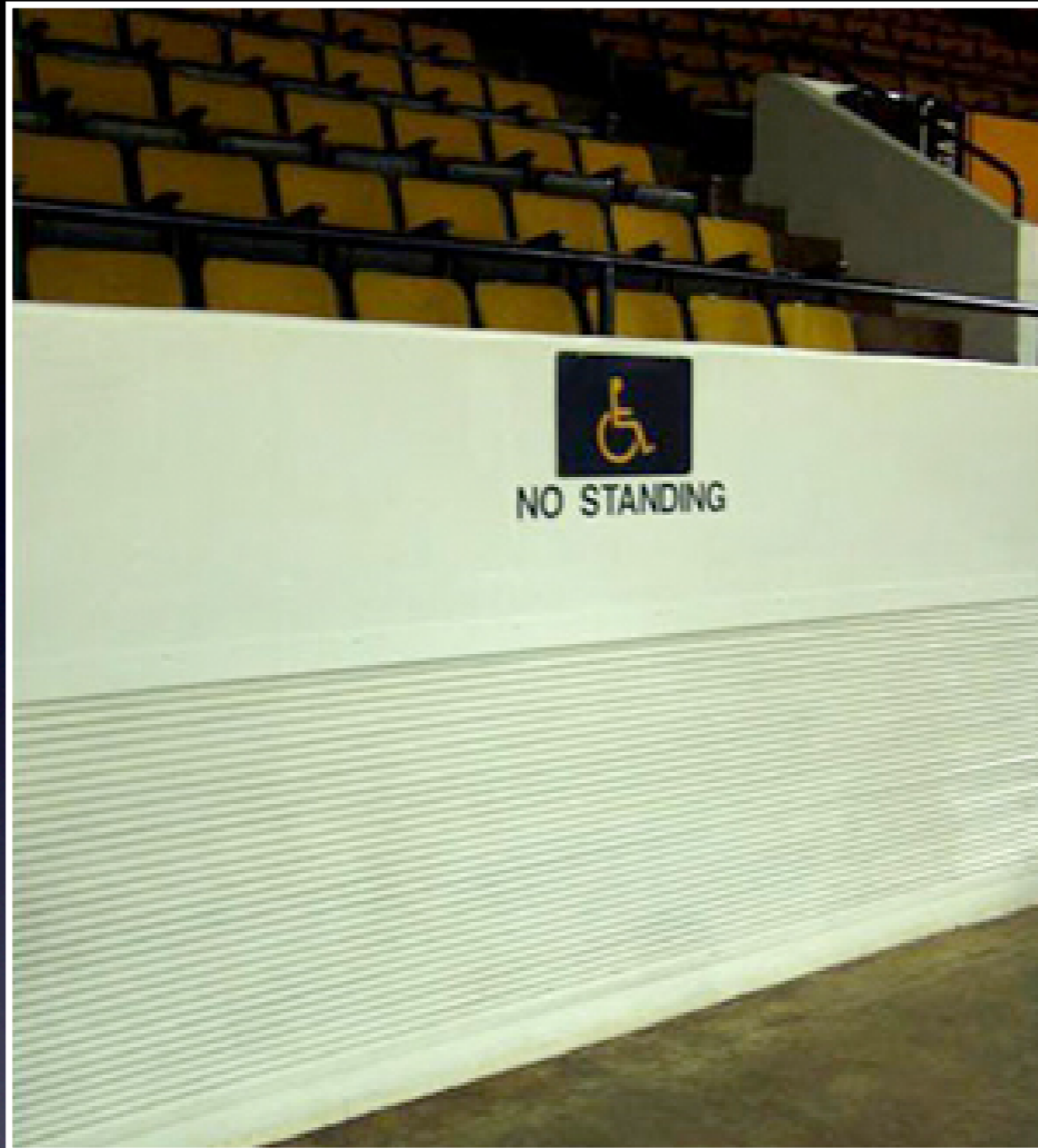
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[October 31, 2006](#)
- [Making Firefox Accessible](#)
[October 16, 2006](#)

Web Developer Toolbar for Firefox

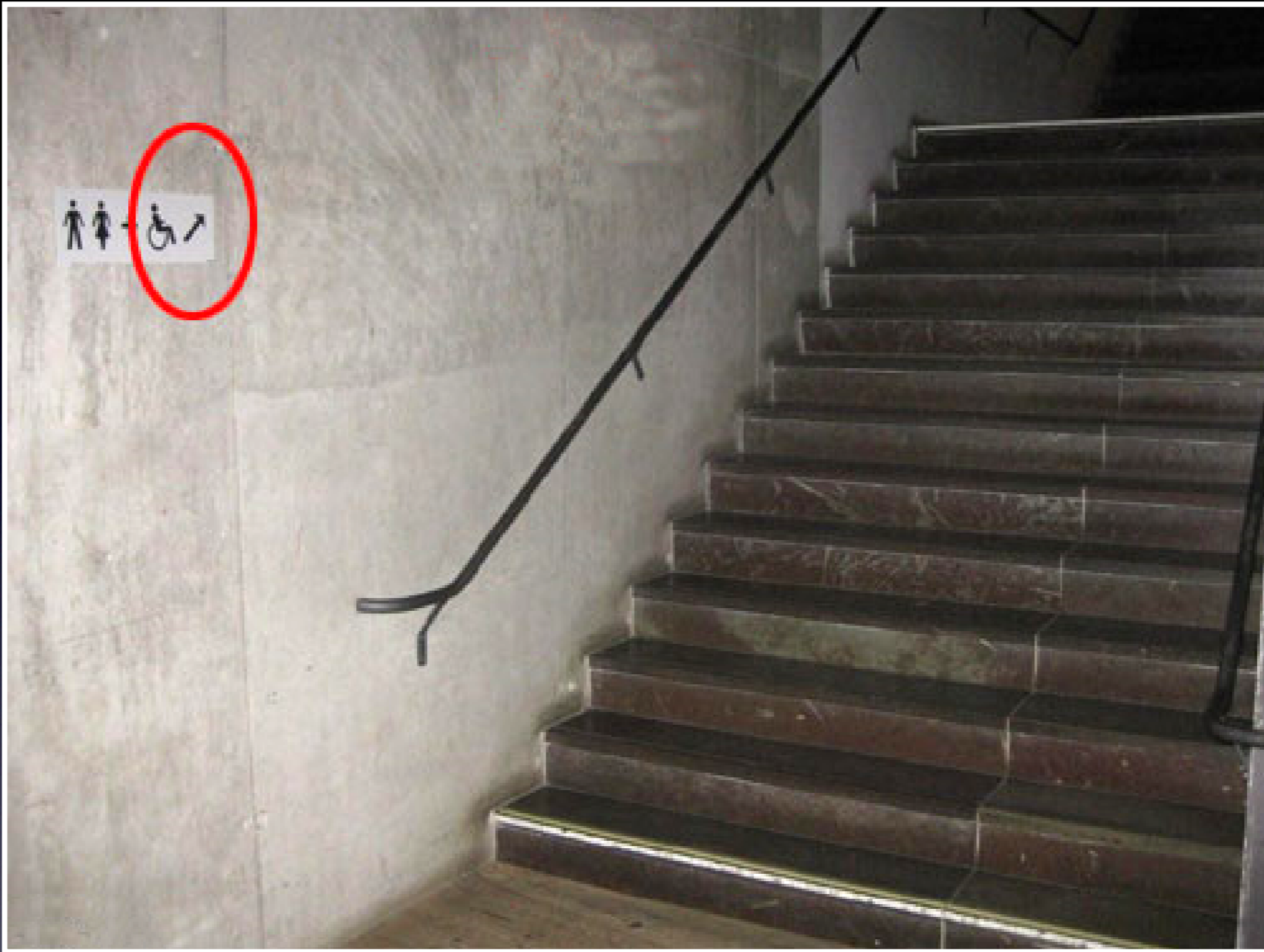


FAIL!





FAIL!



FAIL!



WAVE

web accessibility evaluation tool

μερ 9cc62iprjtlλ ελ9ηπσπou 100j

wave.webaim.org

Thank You!

Jared Smith

<http://webaim.org>

Web based forums

E-mail discussion list

Tutorials, articles, and resources

Blog

Accessibility Reference Guide

