



HTML5 + CSS3

New Tags, New Tools, New Possibilities

A brief history of HTML

- HTML 1.0 (HTML & HTML+) ~1994
- HTML 2.0 - 1995
- HTML 3.2 - 1997
- HTML 4.0 - 1998
- HTML 4.01 - 1999
- XHTML 1.0 - 2000
- XHTML 1.1 - 2001
- XHTML 2.0 - Not Published
 - 100% XML based
 - Incompatible with previous versions
 - Nonsense

HTML5

- Enter WHATWG

- Stands for **Web Hypertext Application Technology Working Group**
- Founded by individuals from Apple, the Mozilla Foundation and Opera Software
- Totally different approach from the W3C
- Actually made sense


- W3C has adopted WHATWG's work

- Using it as the starting point for HTML5 standard

Easy like Sunday morning

- `<!DOCTYPE html>`
- To `/>` or not to `/>`? HTML5 doesn't care
- Frames are dead, thank God.
- Custom Attributes
 - Anything with `data-` in front of it validates
 - For example:
 - `<li class="user" data-name="Vishal Parpia" data-city="Pune" data-status="hungry" />`

Rich Media

- Flash is dead, long live HTML5
- The  Factor
- Sketchy browser support
- Undoubtedly the way forward, but not quite fully cooked yet

Audio

- `<audio>`
- Does exactly what you would expect
- Great JavaScript support
- Plays in-line on iPhones, iPods and iPads
- MP3 vs. Ogg Vorbis
- Fallback to Flash
- *NH7 player demo*
- Shameless plug for Playlistr (playlistr.org)

Video

- `<video>`
- Déjà vu
- H.264 vs. Ogg Theora vs. VP8
- Patent-encumbered
- *Sublime player demo*

Canvas

- `<canvas>`
- Largely script driven
- Powerful graphics: vectors + bitmap manipulation
- Can play video too
- Not accessible, they're working on it
- Google's ex-canvas
- *MetroLeads bar graph demo*
- *Akihabara demo*
- *Pixastic demo*

Web Fonts

- Licensing
- Typekit, Fontdeck, etc.
- WOFF (Web Open Font Format)
 - The new format
 - Broad support, all major browsers (IE included!)
 - Webkit just announced WOFF support plans
- *Typekit Demo*

Forms

- Placeholder text
- Autofocus fields
- Search Boxes
- Sliders
- Date Pickers

More Forms

- Email/Web Address/Number
- Devices with limited keyboard real-estate



New Tags

- Sections

- `<nav>` - Navigation links
- `<section>` - Logical grouping of content, usually with a heading
- `<article>` - Independently distributable content (self-contained)
- `<hgroup>` - A group of headings
 - Very useful for styling nested headers, infinite depth (h1-h6 no longer the limit)
- `<header>` & `<footer>` - A header and footer to a section
 - Can (and probably should) wrap a `<nav>` and `<hgroup>`
 - Can't nest a `<header>` inside a `<header>` (duh)
- `<aside>` - Sidebar content

More New Tags

- Text-level

- `<time>` - Time and date tag
- `<code>` - Represents computer code.
 - Should still be wrapped in a `<pre>` when providing a snippet
- `<var>` - A variable
- `<samp>` - Sample computer output
- `<mark>` - The highlighter tag.
 - Should be used when displaying search results to highlight a word in relation to a search phrase

CSS3

- Introduces many tags that appeared in browsers first
- Vendor prefixes
- Support increasing by the day

Borders

- Graceful degradation
- Coming in IE9
- Rounded borders using `border-radius`
- Custom borders using `border-image`

RGBA & Gradients

- Alpha transparency as a color specification
- Opacity applies to all child elements within the styled element
- Gradients, any number of color stops
- Allows for very interesting effects
- *CSS iOS Demo*

Transitions & Animations

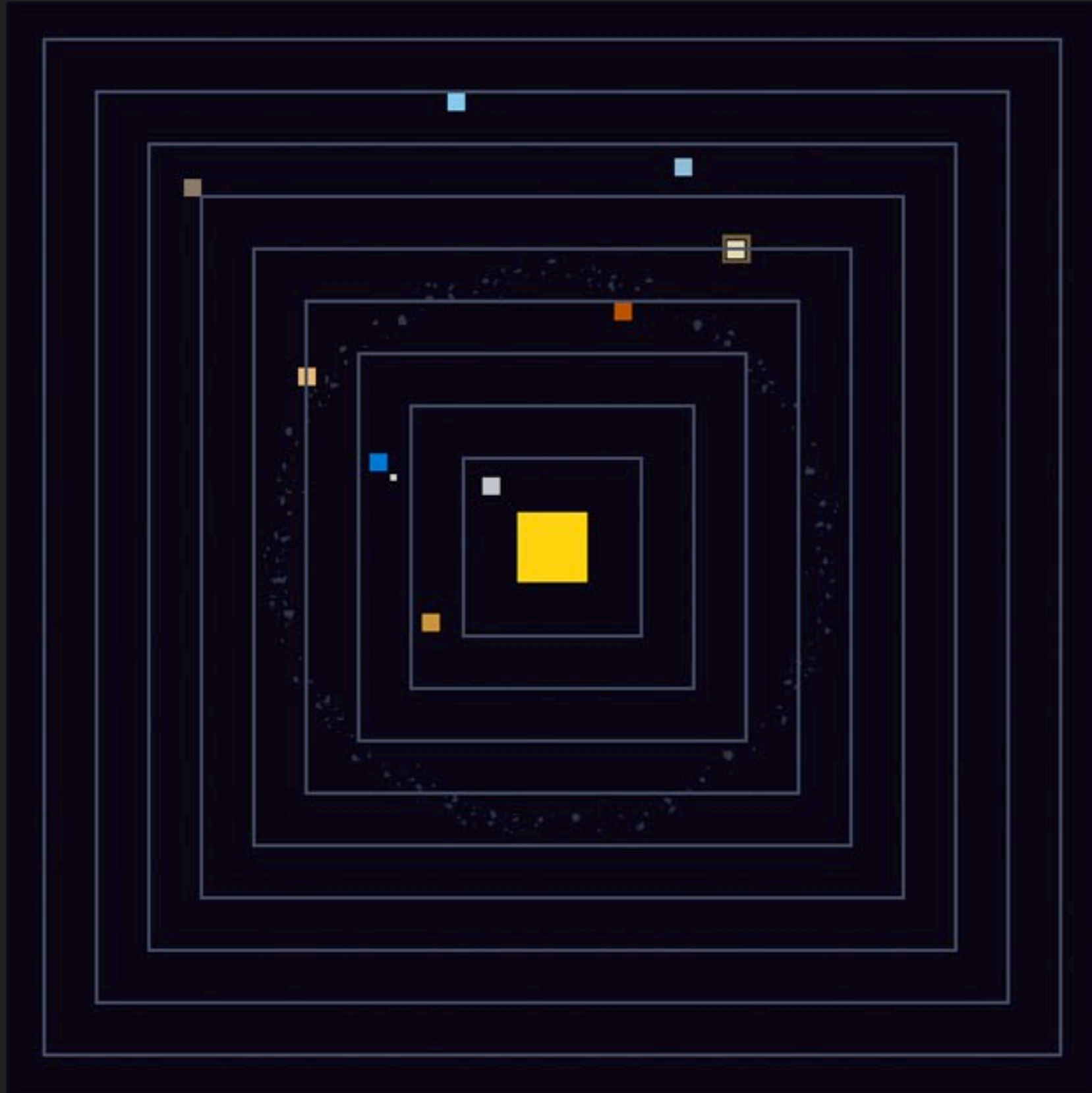
- Animations in CSS
- No Javascript
- Designers can do animation
 - It's much easier than flash
- **animation** and **transition**
- Transitions switch from one state to another
- Animations repeat over and over as necessary
 - Only webkit support so far
- *TrentWalton Demo*
- *CSS3 Solar System Demo*

Transforms

- Transformations apply to ANY Block or Inline element
- 2D Transforms
 - Translate
 - Scale
 - Rotate
 - Skew
- 3D Transforms
 - Translate3D
 - Scale3D
 - Rotate3D
 - Perspective
- *Westciv Demo*

$$2+2=5$$

- The whole is greater than the sum of its parts
- *Bradshaw Enterprises Demo*
- *Craftymind Demo*
- *Guillermo Esteves' Demo*



The elephant in the room

- IE9 promises HTML5 + CSS3 making the big 3 compliant
- Support for `<canvas>`, `<audio>` & `<video>`
- Support for `borders` & `rgba`
- That's all they've got so far
- Beta is in September
- HTML5Readiness.com

Start Today

- Many things will work right now
- Don't be afraid to stick them in your designs, clients like cool stuff
- Be creative
- ALWAYS test fallback support on your target browsers
- Use Modernizr and fallback gracefully to JS
- Stay up-to-date and learn constantly



Thanks!

for links and a copy of this presentation go to

<http://vizkid.com/extentia>