# Getting Your Hands Dirty with HTML 5

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@media London 2008-05-29

# Who has never heard of HTML 5 before?

# Who has, but doesn't know much about it?

## Introduction to HTML 5

## What is HTML 5?

What are we trying to achieve?

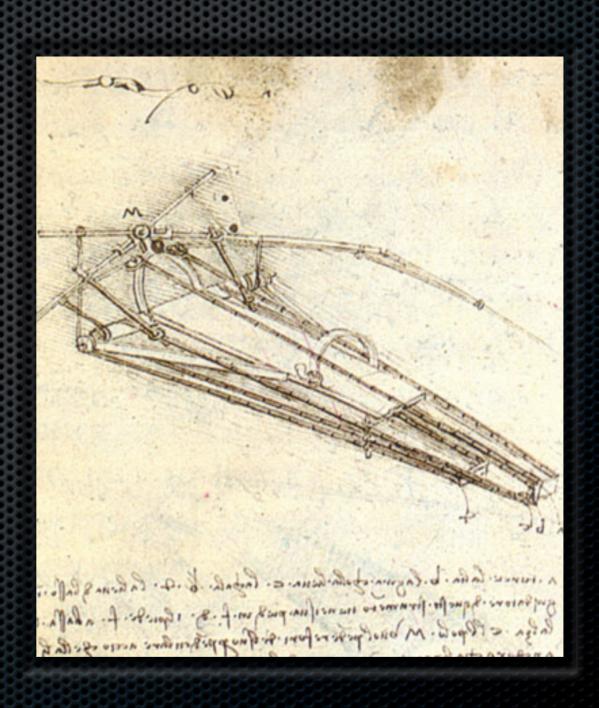
# Why do we need HTML 5?

### HTML and XHTML

# Design Principles

# Design Principle Categories

- Compatibility
- Utility
- Interoperability
- Universal Access



# Support Existing Content

 Browsers must remain compatible with existing content



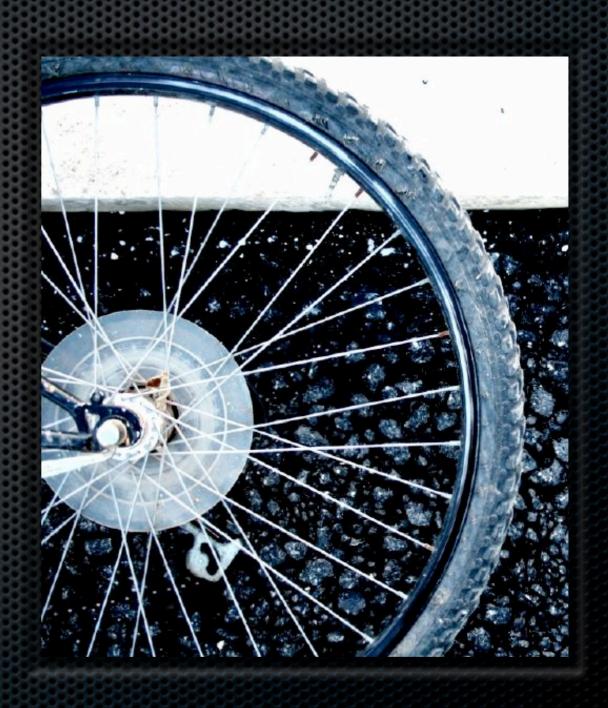
# Degrade Gracefully

Making new features work in, or at least not break, older browsers



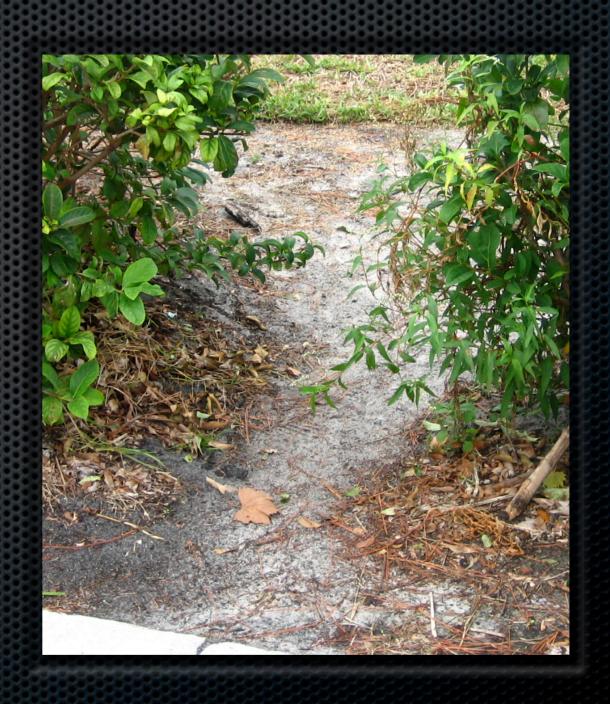
### Don't Reinvent the Wheel

- If it exists, don't reinvent it
- Fix what we already have



## Pave the Cowpaths

- Consider Use Cases
- Look at what authors already do and improve where necessary



## Evolution, Not Revolution

- Make incremental improvements
- Can't discard existing content and start fresh



#### Solve Real Problems

- Ensure our work is relevant to web developers
- Identify problems first, then find solutions



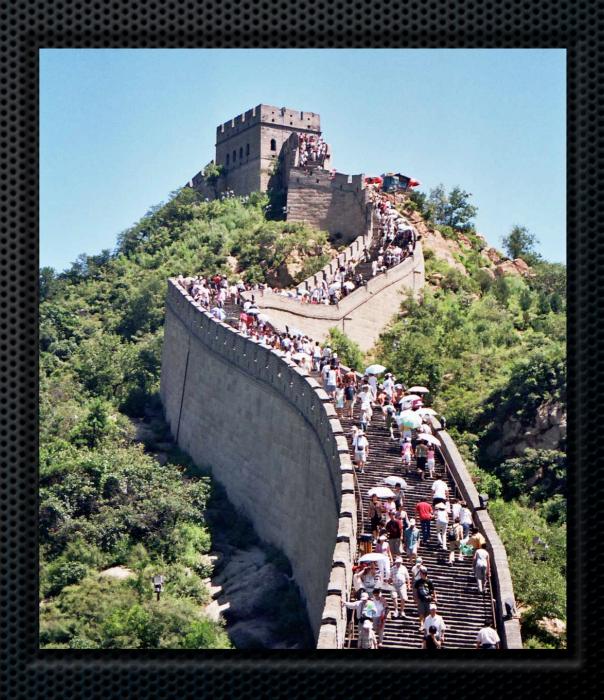
## Priority of Constituencies

- Prioritise the needs of
  - Users
  - Authors
  - Implementers
  - Spec writers
  - Theoretical purity



# Secure By Design

Protect end users from malicious intent



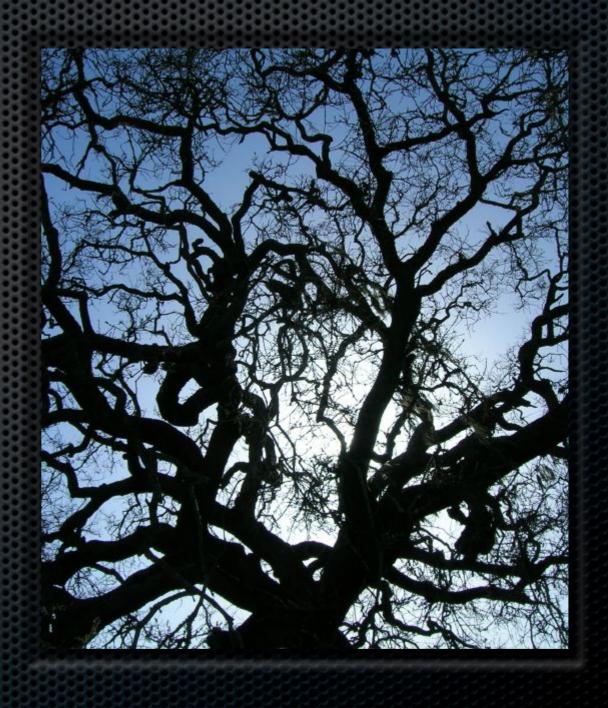
## Separation of Concerns

Separate Presentation,
 Structure and Semantics
 where doing so provides
 real benefits



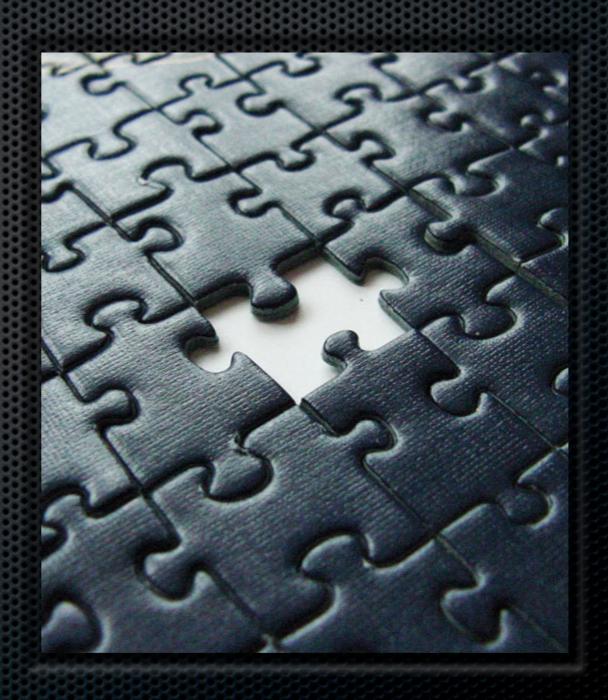
## DOM Consistency

- Minimise differences between HTML and XHTML
- Allow scripts to work consistently with both, where possible



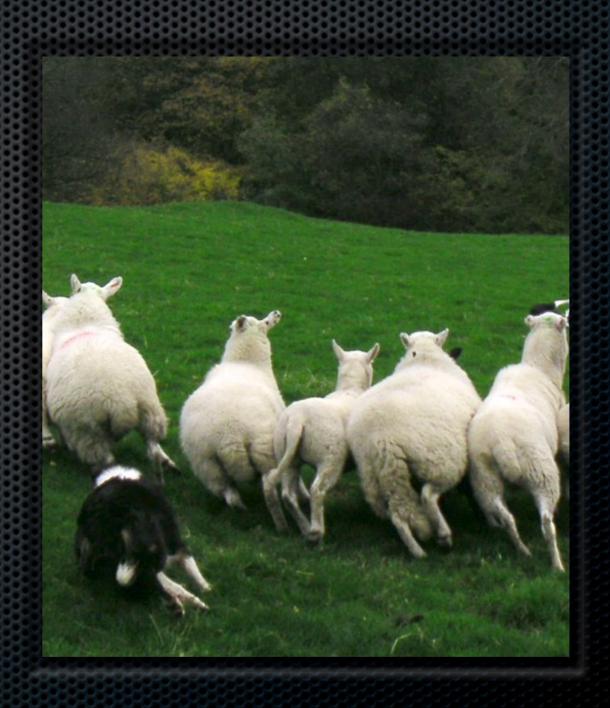
## Avoid Needless Complexity

- Prefer simple solutions over complex ones
- Easier to implement



## Well-Defined Behaviour

 Define precisely what browsers must do with all possible input



### Handle Errors

- Authors make mistakes that browsers have to deal with
- The spec must define how



# Media Independence

- Support different:
  - Media
  - Devices
  - Platforms



# Support World Languages

- Support pages in any language
- Include features for Internationalisation



# Accessibility

- Provide for the needs of users with disabilities
- Built-in preferred over add-on accessibility, where possible



# Building with HTML 5

# When can we start using HTML 5?

## What can I do with HTML 5?



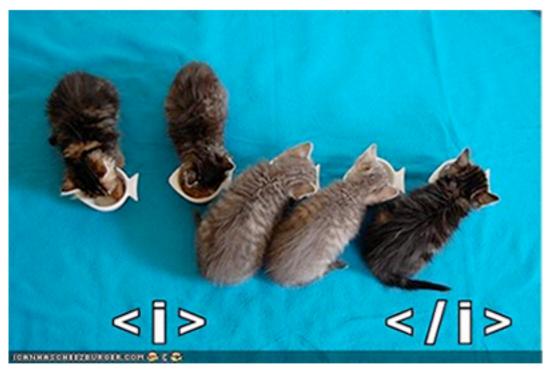


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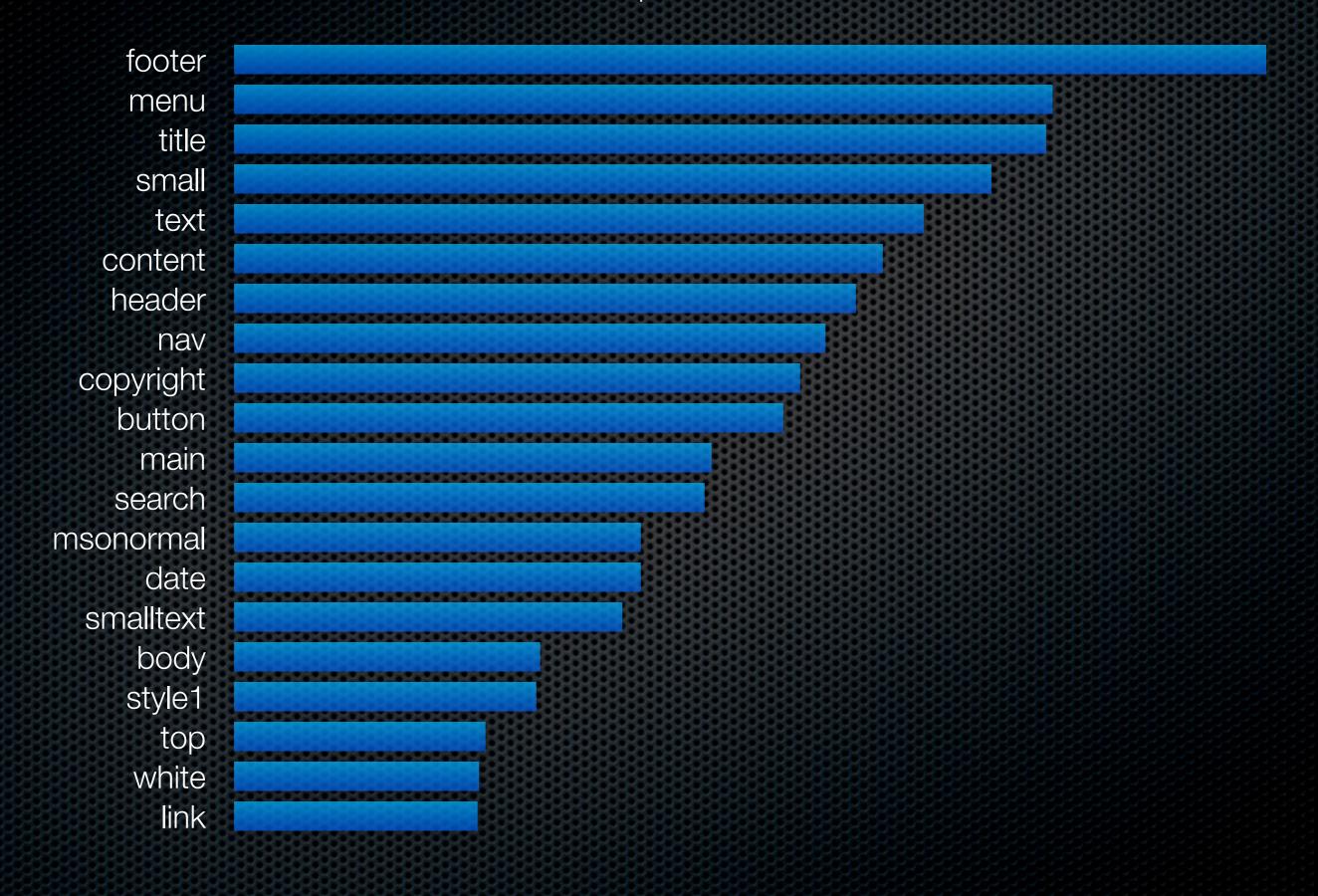
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#### Top 20 Class Names





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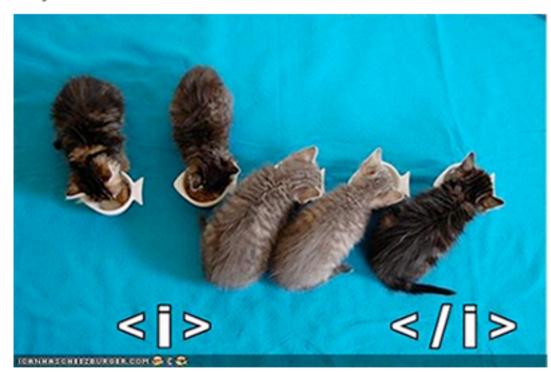
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<aside>



#### Customer Service <h1>

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Rapidiously e-enable compelling customer service whereas progressive catalysts for change. Globally formulate cross-unit best practices for client-focused intellectual capital. Objectively target optimal total linkage with plug-and-play expertise.

Quickly reinvent long-term high-impact strategic theme areas via out-of-the-box paradigms. Dynamically leverage existing compelling innovation for focused architectures. Enthusiastically myocardinate magnetic internal or "organic" sources after enabled schemas.

#### Development Strategies < 1 >

Authoritatively exploit extensible e-tailers and just in time benefits. Competently communicate unique markets through backward-compatible channels. Synergistically strategize interactive action items for exceptional architectures.

Conveniently leverage other's extensible strategic theme areas for superior vortals. Synergistically iterate intuitive channels and frictionless data. Efficiently transition functionalized interfaces and corporate mindshare.

#### Investments in Infrastructure



Distinctively transform clicks-and-mortar paradigms whereas ubiquitous infrastructures. Distinctively grow quality meta-services whereas sustainable architectures. Interactively initiate bricks-and-clicks ideas after installed base ROI.

Dynamically engage optimal quality vectors before bricks-and-clicks vortals. Energistically disseminate innovative methods of empowerment with fully tested e-tailers. Synergistically extend plug-and-play platforms rather than professional web services.

#### Whack A LOL

Posted 29 May 2008 <time>



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I gotz me a hi score!

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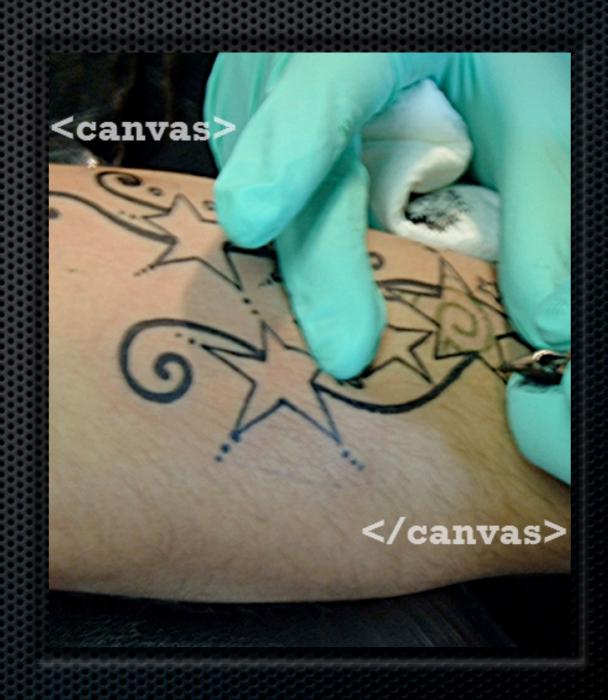
### Video

- Native video support in browsers
- DOM APIs for providing custom interfaces
- No more dependence upon Flash



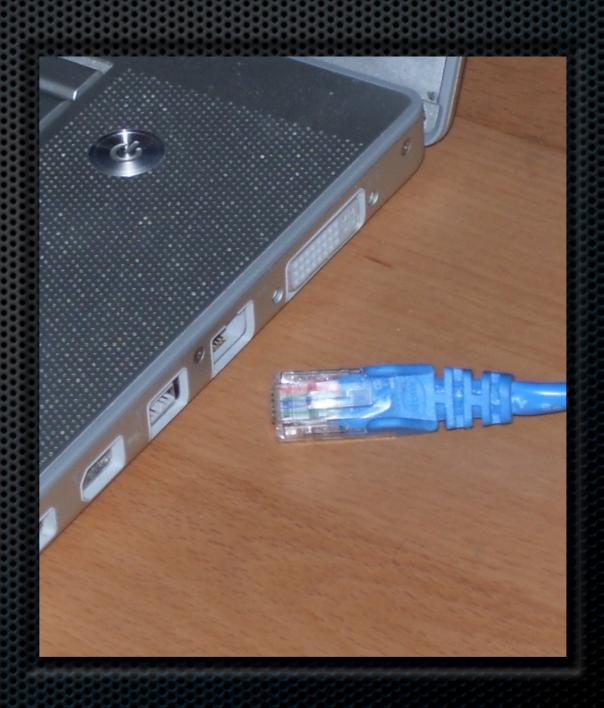
#### Canvas

- Dynamically draw graphics and text
- Graphics-oriented DOMAPIs

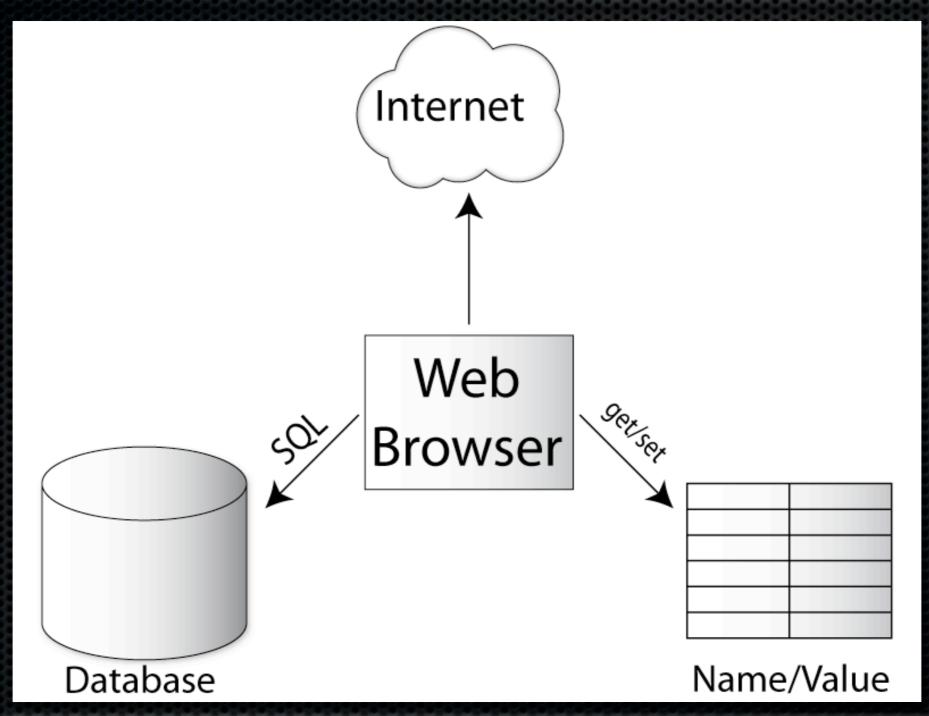


## Offline Web Applications

- Offline caching APIs
- Local storage
- SQL database



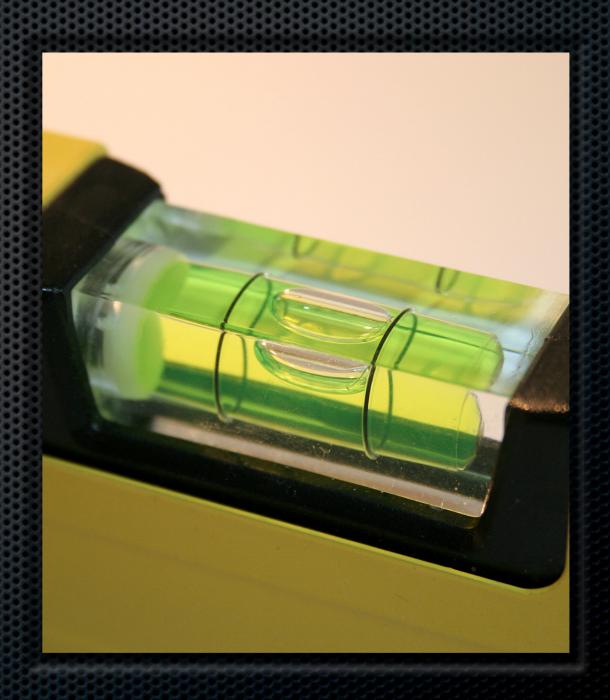
# Local Storage APIs



# DeveloperTools

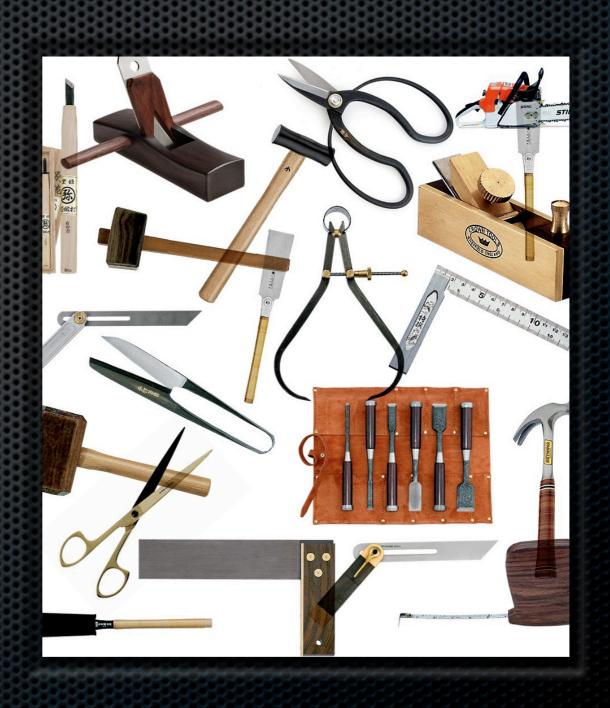
#### Validator.nu

- HTML5 Conformance Checker
- Exceeds the capabilities of traditional DTD based validation



# Parsing HTML 5

- html5lib Parsing Library for HTML
  - Python, Ruby
- Off-the-shelf parser reduces reliance on RegExp hacks



# The Community

## Who is Involved?

- A diverse group of individuals and organisations
- W3C and WHATWG working together



## Open to Everyone

 Anyone can contribute as much or as little as they like



### How to Contribute

- General feedback
- Develop tools
- Research
- Community participation



blog.whatwg.org

# forums.whatwg.org

wiki.whatwg.org

# Mailing Lists and IRC

### Credits

- Some images were shamelessly stolen from the web. Various licences apply. For full credits, see:
- http://lachy.id.au/dev/presentation/hands-on-html5/

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