

Modern Web Developmen

t

Part one

'HTML5'

The W3C **co-opted** the term
'HTML5' to mean the following:



Semantics



CSS3



Multimedia



Graphics & 3D



Device Access



Performance



Offline & Storage



Connectivity

Some of these technologies need to be distinguished from HTML5

The core concepts introduced in HTML5:

- Richer semantics
- Multimedia
- Forgiving markup

HTML5 has nothing to do with CSS3

CURRENTLY

- We are still figuring out modern browser capabilities.
- There are many experiments and demos happening daily with HTML + JS + CSS
- We have returned to the early days of **DHTML**

HTML



TRANSITIONAL

Community Confusion

- You can use HTML5 today.
- Not a complete standard yet, but still a wonderful step forward.

"Never before has it been so pertinent to lay the foundations for future web developers to build upon. HTML5 is infrastructure building. A utopian web has never felt so near."

HTML



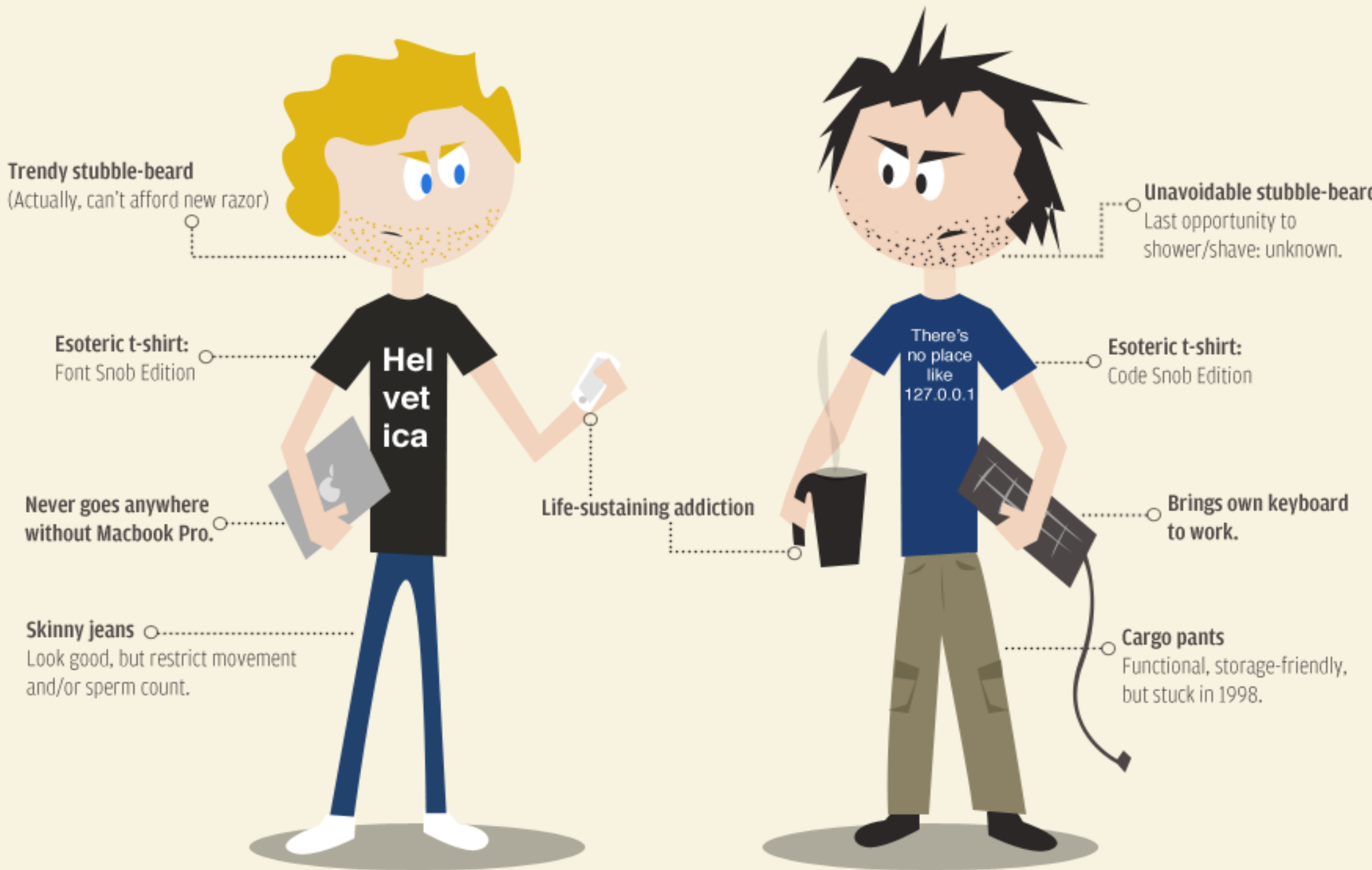
PART TWO

The Community

The web development community:

- It has always thrived, and always will.
- Brimming with talent. Very fun to be involved in.
- No one developer is the same as another.
- Social media has changed the landscape
- Web designers are web developers too!

WEB DESIGNERS VS WEB DEVELOPERS



PART THREE

Reading material

Modern web development *concerns* all these subjects. They **DEPEND** on each other.

- Progressive enhancement
- Responsive design
- High Performance
- Below the fold design
- UI patterns
- Anti patterns
- Feature creep
- User experience
- Link rot

- MIME types
- Internationalisation
- Colour psychology
- Discoverability
- Design principles
- Navigation
- Form vs function
- Browser exploits
- Input validation
- Server logs

PART FOUR

Security

The state of security *now...*

- **html5sec.org** ➡ discloses a range of browser exploits.
- The latest anti-virus programs now detect **obfuscated JS** as potentially *abusive*.
- The **Java** Plugin was blocked by Mozilla on Feb 2011.
- Browser "**sandboxing**" has huge potential
- With tools like FireBug, and browser **dev tools** getting better, we have a sort of X-Ray vision into a site's code and its **intentions** like never before.

PART FIVE

Developing with JavaScript + CSS

JS

JavaScript tips

- If you can dream it up, it's been done already, by someone, in JavaScript.
- Our job as developers is to pick the projects which deserve the most attention, and improve on them
- JavaScript has many pitfalls, even for advanced coders. WTFJS.com documents the more quirky aspects of the language.
- Before doing anything in pure JS (library agnostic JS), ask could it be easier to use a library?
- If solely using a library, ask can I do this more efficiently without a library?
- Maybe you need to use a micro-library? microjs.com has all you need.

Javascript's popularity:

- var JS = Most_Popular_Language_Evaar
- The freedom and ease by which users can view a site's source-code has propelled JavaScript to center stage
- Some developers love the language so much, they have suggested jQuery, and other game-changing libraries to be 'baked' into the browser.
- Javascript doesn't care that you use `x = new Array()` instead of `x = []` but syntax police will berate you for it.



CS5



CSS3. What You Need To Know

- Now we have features like `calc()`, 3D transformations, transitions, and a generous array of new selection methods to play with
- Responsible for numerous trends like Lobster font, Ribbons, and "pure CSS" demos.
- Many tools exist online now to combat vendor-prefix issues. `css3please`, `prefixfree`, and `cssprefixer`, to name a few
- Coercing vendor prefixed CSS into a 'standard' version ignores the efforts of the W3C

CSS3. The future

- In webkit, you can style scrollbars with CSS
- There is an ongoing debate over how much control a designer should have over native controls
- MozillaLabs' Chromeless project allows the site visitor to forget they're using a browser
- One day, the actual browser window may be freely styled with CSS, who knows?
- JavaScript emulations of the SELECT element styled with CSS are testament to how much control designers want in a web page.

PART SIX

Browsers

So True

"Anyone who slaps a 'this page is best viewed with Browser X' label on a Web page appears to be yearning for the bad old days, before the Web, when you had very little chance of reading a document written on another computer, another word processor, or another network."

- Tim Berners Lee

Modern browsers

- Modern browsers are designed by the web, for the web
- End users have a say in how browsers should be designed
- With extensions / addons, feature creep is not an issue
- More focus is put on standards than ever before
- Open source has allowed modern browsers to flourish
- Closed source / proprietary browsers still remain an issue...



Chrome,
say something!

Yeah, you
always break
our coolest
toys !

Just use
ChromeFrame

Go home,
IE !

HEY YOU
GUYS !
HOW COME
YOU NEVER LET
ME PLAY?

Getting involved

- Promote open source browsers by telling friends, family, and colleagues about them
- Go out of your way to install firefox/chrome on people's computer, and explain why you did it
- Use your online influence and web presence to explain why closed source browsers conflict with the open web's ethos

PART SEVEN?

Can I haz more?

The behemoths of web development:

- [The MDC \(Mozilla Doc Center\) / MDN](#)
- [The Chromium Projects](#)
- [Yahoo Developer Network](#)
- [The Smashing Network](#)
- [The JavaScript Garden](#)
- [Micro JS. Micro libraries](#)
- [A List Apart](#)

That's all folks. And remember:

- The more you learn, the better you get, and the faster you become
- The 'Zone' is the only mindset necessary to develop anything
- Changing people is not a challenge, it's a waste of time. Find your fellows, don't try to make them. Get gold through mining not alchemy.
- If it's not fun, it's not worth doing. Coding web apps and websites should not be like coding assembly.
- The best developers are the ones who freely admit they know nothing about anything, but everything about nothing :)