

A WEB OF STRUCTURED CONTENT



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WHAT IS WEB CONTENT?

- Textual, visual or aural content experienced when using a browser
 - « Web Page »
- A mix of multiple languages and file formats
 - Each with its own usefulness (HTML, CSS, JS ...)
 - Hierarchically nested: e.g. CSS content in HTML content
 - Hierarchically referenced: hyperlinks, e.g. JS content referenced from HTML content

LANGUAGES OF THE WEB

- HTML / XHTML
 - Content structuration
 - Basic rendering
- CSS
 - Presentation instructions to render the HTML content
 - Layout, animations, ...
- SVG
 - Presentation instructions to render rich graphical content
- JS
 - Programmatic behavior to be added to HTML or SVG content

LANGUAGES OF THE WEB (2)

- XML

- Data exchange, validation, ...

- JSON

- Data exchange

- WOFF/EOT

- Font download

- MathML

- Mathematical formulas

EXAMPLE OF MIXED LANGUAGES

```
<!DOCTYPE html>
<html>
  <head>
    <title>Hello</title>
    <script>
      window.onload=function(e) { console.log("Page loaded!"); };
    </script>
    <style type="text/css">
      body { width: 30%; margin: auto; }
      p {
        font-size: 30px;
        font-family: sans-serif;
      }
    </style>
  </head>
  <body>
    <p>
      
      This is a simple image, but next is a vector graphics image
      <svg style="float: right; width: 100px; height: 100px">
        <rect rx="5" width="50" height="50" fill="lightblue" onclick="console.log('Rect click')"/>
      </svg>
    </p>
  </body>
</html>
```

THE WEB LAYERS

HTML5

XSLT

XHTML

SVG

XML

CSS

Unicode

HTML

JS

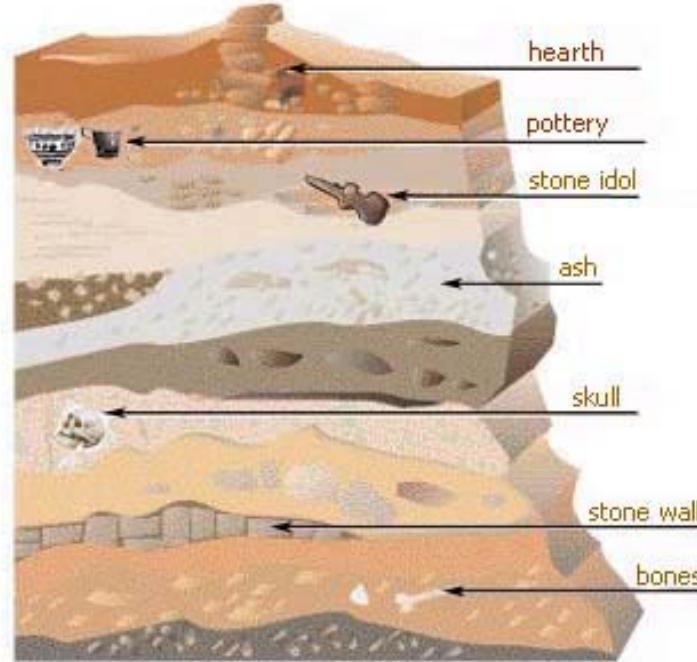
ASCII

SGML

URL

more
recent

more
ancient



TOOLS TO CREATE WEB CONTENT

- Basic tools
 - Text Editor, IDE
- Advanced Tools
 - Adobe Suites
 - ...
- Code playgrounds
 - [JS Fiddle](#)
 - [Code Pen](#)
 - [CSS Deck](#)
 - [JS Bin](#)

TOOLS TO DEBUG

- Browser-integrated debugger (F12)

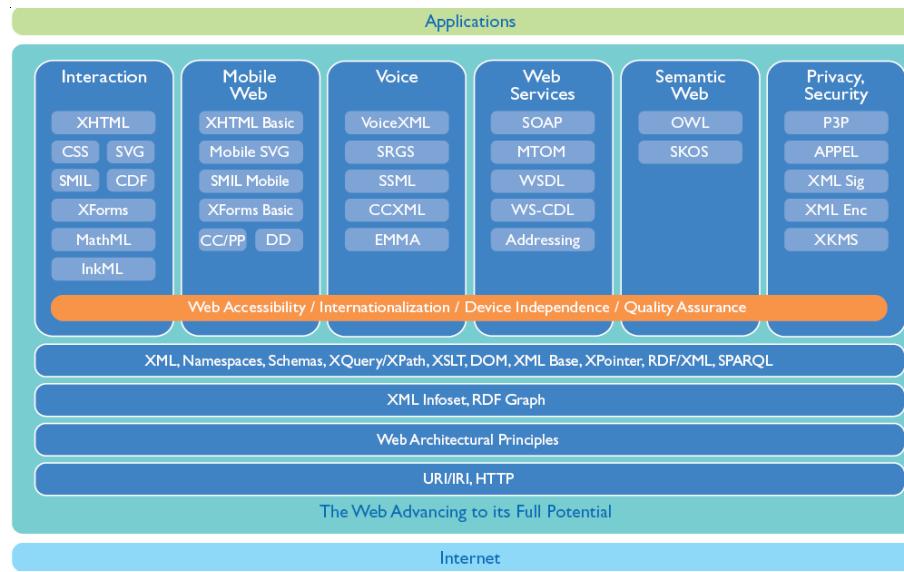
- Chrome Dev Tools
- Mozilla Firebug
- Microsoft Developer Tools
- Safari Developer tools

- What kind of debugging ?

- Web Inspector: HTML, CSS
- JavaScript debug
- Network monitoring
- Rendering Performances

WEB CONTENT

A LOT OF W3C RECOMMENDATIONS



THE WORLD WIDE WEB CONSORTIUM (W3C)

- International consortium
 - 300-400 members
 - Created in 1994, by Tim Berners-Lee
 - Produces public and « royalty-free » specifications
 - Thanks to a specific patent policy
 - Follows a specific standardization process
 - With snapshot (stable and final) versions (CR, PR, REC)
 - With multiple intermediate drafts (WD, FPWD, LCWD)
-



THE WHAT WG

WEB HYPERTEXT APPLICATION TECHNOLOGY WORKING GROUP

- Alternative to W3C
 - Created in 2004 by Mozilla, Opera, Apple, later joined by Google
 - to circumvent some problems of W3C (slowlyness)
- Produces "Living Standards"
 - Representing the ever changing status of implementations by browsers
- Main developpers of HTML(5) and other specifications
- Be careful of the mismatches between specs!!

DOCUMENTATION

- W3C Web Platform Docs
- Mozilla Developper Netwok (MDN)
- Microsoft MSDN
- W3C Website
- W3C Document Validator
- WHATWG
- and many more

