HTML 5:
The new HTML for the Web

Olle Olsson
Swedish W3C Office
Swedish Institute of Computer Science (SICS)

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The aim: quick highlight of HTML 5 – rationale, approach, ....

Parts of presentation:
1. Motivation and objectives
2. Approach taken
3. Some specific highlights
4. Conclusions

1. HTML5: Motivation and Objectives
   Who needs this?
Too many HTMLs?

Main reasons

One key argument: classical HTML ...
- historically intended for *documents*.
- not adequate support for *web applications*.

Other issues:
- *Forms* handling insufficient
- *Elements* (“tags”) not matching prevalent needs
- look-and-feel and behavior is decided by *browsers*.
- etc.
Stakeholder challenges

End users
- Web content look-and-feel and behavior depends on browser.
- Variation in look-and-feel and behavior depends on content authoring styles

Web content creators
- Browser independent authoring difficult
- Mis-use of markup when needs do not match markup vocabulary

Browser vendors:
- Not completely well defined: script execution, ...
- Handling of ill-formed content

Objectives
- Provide good support for modern documents and web applications
  - Web 2.0; social sites; online shops; ...
- Support legacy web content
- Optimise backward compatibility
  - HTML4, XHTML 1
- Cover common browser functionality
- Make web content authoring more uniform
- Clarify processing model ... conforming and non-conforming contents
2. HTML 5: Approach taken

How can objectives be reached?

W3C HTML Working Group

- 500 participants
  - 80 from Apple, Google, HP, IBM, Microsoft, Mozilla, Nokia, Opera, ...

- Collaboration with WHAT WG
  - “Web Hypertext Application Technology WG”

- Start 2007, end 2010
The paradigm

- HTML 5 is a content model, not a syntax
- Emphasises what web contents *consists* of, not how it is *represented*.

Definition of *Document Object Model*
- Common base for HTML and XHTML

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**HTML 5 **

A vocabulary and associated APIs for HTML and XHTML

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**HTML 5 == HTML and XHTML**

- `html Parse/ Serializer`
- `XML Parse/ Serializer`

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <title>HTML Example</title>
  </head>
  <body>
    <p> This is a sample HTML document. </p>
  </body>
</html>
```

```
<html xmlns="http://www.w3.org/1999/xhtml" xml:lang="en">
  <head>
    <title>XHTML Example</title>
  </head>
  <body>
    <p> This is a sample XHTML document. </p>
  </body>
</html>
```
3. HTML 5: Some specific highlights

What's different?

What is new?

- Structure of textual documents
  - section, article, header, footer, ...
- Multimedia
  - audio, video, embed, ...
- Graphics
  - canvas, figure, ...
- Forms
  - input, ...
- Editing
  - drag-and-drop, copy-and-paste, undo, ...
- etc...
What is removed?

- Text
  - big, font, tt, ...
- Frames
  - frame, frameset, noframes, ...
- Misc
  - applet, acronym, ...
- etc...

4. HTML 5: Conclusions

What one-liner?
Conclusions

HTML 5 is the robust replacement of HTML4, XHTML 1 and DOM2/HTML

- Target: re-engineer HTML to match current and forthcoming needs
  - Knowledge base: multiple years of web content creation
- Target: preserve value of present investment in web contents
  - Backward compatibility
- Target: predictable browser behavior on ill-formed contents
  - Harmonizing handling of contents with errors

Thank You for your attention!