

(X)HTML

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Lecture outline

- (X)HTML as a Web Standard
- Basic Elements, Semantic and Visual Markup, MathML, SVG, ...
- Difference between HTML 4.x and XHTML
- XHTML Structure and Document Types
- XHTML and Namespaces

(X)HTML - The Web Standard

XHTML

- HTML transcription using the XML Standard
- Valid XHTML Document is well-formed XML
 - should contain XML prolog
 - attribute values surrounded either by quotes (") or apostrophes (')
- Elements should have start and end tag
- Recent version 1.1, mostly used version is 1.0

XHTML - Document Structure

- XHTML1 document:
 - must fulfill one of three XHTML DTDs
 - the root element must be html
 - the root element must contain namespace declaration `http://www.w3.org/1999/xhtml`
 - the root element must precede document type declaration
 - root element example
 - `<html xmlns="http://www.w3.org/1999/xhtml" xml:lang="en" lang="en">`

XHTML1 DTDs

- XHTML1 Strict

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Strict//EN"  
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-strict.dtd">
```

- Strictly separates the structure and the visual markup.
- Doesn't define the visual markup tags and attributes (, ...).
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XHTML1 DTD's

- XHTML1 Transitional:
`<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0
Transitional//EN
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">`

Document Type Declaration

- Used by browser to select correct web page rendering mode.
- No other purpose.
- For XML syntax is optional.
- DOCTYPE: `<!DOCTYPE html>`
- Case insensitive at HTML syntax.
- No reference to DTD.
 - Used by browser to select correct web page rendering mode.

XHTML1 - Using Namespaces

- Using namespaces the XHTML can be combined with other XML based markups.
 - SVG - vector graphics markup
 - RDF - semantic markup
 - MathML - mathematical formula markup
 - Formerly XHTML+Voice
 - Used to allow to fill HTML forms using voice.
 - Support on the side of browser needed
 - Plugins interconnecting browser and VoiceXML platform needed.
 - Limited support of languages.

XHTML1 - Resources

- HTML4 Specification
- XHTML 1.0 Specification
- XHTML 1.1 Specification
 - XHTML 1.0 + modularization
 - See [specification](#) for more details.
- [XHTML 1.0](#) reference at zvon.org
- ...