



XHTML™ 1.1 - Module-based XHTML - Second Edition

W3C Editor's Draft 23 January 2008

This version:

<http://www.w3.org/TR/2007/ED-xhtml11-20080123>

Latest stable version:

<http://www.w3.org/TR/xhtml11>

Previous Editor's Draft:

<http://www.w3.org/MarkUp/2008/ED-xhtml11-20070416>

Diff from previous Editor's Draft:

[xhtml11-diff.html](#)

Previous Recommendation:

<http://www.w3.org/TR/2001/REC-xhtml11-20010531>

Diff-marked version from previous Recommendation:

[xhtml11-rec-diff.html](#)

Version 1.1 Editors:

Shane McCarron, Applied Testing and Technology, Inc.
Masayasu Ishikawa, W3C

Editors:

Murray Altheim, Sun Microsystems
Shane McCarron, Applied Testing and Technology

This document is also available in these non-normative formats: PostScript version, PDF version, ZIP archive, and Gzip'd TAR archive.

Copyright ©2007 W3C® (MIT, ERCIM, Keio), All Rights Reserved. W3C liability, trademark and document use rules apply.

Abstract

This document defines an XHTML document type that is based upon the module framework and modules defined in XHTML Modularization [XHTMLMOD [p.13]]. The purpose of this document type is to serve as the basis for future extended XHTML 'family' document types, and to provide a consistent, forward-looking document type cleanly separated from the deprecated, legacy functionality of HTML 4 [HTML4 [p.13]] that was brought forward into the XHTML 1.0 [XHTML1 [p.13]] document types. This document type is most similar to XHTML 1.0 Strict, built using XHTML Modules. This means that many facilities available in other XHTML Family document types (e.g., XHTML Frames) are not available in this document type. These other facilities are available through modules defined in XHTML Modularization, and document authors are free to

define document types based upon XHTML 1.1 that use these facilities (see [XHTMLMOD [p.13]] for information on creating new document types).

Status of this document

This section describes the status of this document at the time of its publication. Other documents may supersede this document. A list of current W3C publications and the latest revision of this technical report can be found in the W3C technical reports index at <http://www.w3.org/TR/>.

This document is a Working Draft in anticipation of entering the W3C's Proposed Edited Recommendation process. It reflects clarifications and corrections as a result of many years of use by the community. It also includes an new implementation using XML Schemas. This implementation has gone through the W3C process, including Last Call, and is now integrated here in anticipation of its publication as a W3C Recommendation. It should not be normatively referenced until this document reaches the W3C Recommendation status.

Publication as a Working Draft does not imply endorsement by the W3C Membership. This is a draft document and may be updated, replaced or obsoleted by other documents at any time. It is inappropriate to cite this document as other than work in progress.

This document has been produced by the W3C XHTML 2 Working Group (*members only*) as part of the W3C HTML Activity. The goals of the XHTML 2 Working Group are discussed in the HTML Working Group charter.

This document was produced by a group operating under the 5 February 2004 W3C Patent Policy. W3C maintains a public list of any patent disclosures made in connection with the deliverables of the group; that page also includes instructions for disclosing a patent. An individual who has actual knowledge of a patent which the individual believes contains Essential Claim(s) must disclose the information in accordance with section 6 of the W3C Patent Policy.

Public discussion of HTML takes place on www-html@w3.org (archive). To subscribe send an email to www-html-request@w3.org with the word *subscribe* in the subject line.

Please report errors in this document to www-html-editor@w3.org (archive).

A list of current W3C Recommendations and other technical documents can be found at <http://www.w3.org/TR>.

Quick Table of Contents

1. Introduction	.5
2. Conformance Definition	.7
3. The XHTML 1.1 Document Type	.9
A. Changes from XHTML 1.0 Strict	11
B. References	13

C. XHTML 1.1 Document Type Definition	15
D. XHTML 1.1 XML Schema Definition	27
E. Acknowledgements	49

Full Table of Contents

1. Introduction5
2. Conformance Definition7
2.1. Document Conformance7
2.1.1. Strictly Conforming Documents7
2.2. User Agent Conformance8
3. The XHTML 1.1 Document Type9
A. Changes from XHTML 1.0 Strict	11
B. References	13
B.1. Normative References	13
B.2. Informative References	13
C. XHTML 1.1 Document Type Definition	15
C.1. SGML Open Catalog Entry for XHTML 1.1	15
C.2. XHTML 1.1 Driver	15
C.3. XHTML 1.1 Customizations	21
D. XHTML 1.1 XML Schema Definition	27
D.1. XHTML 1.1 Schema Driver	27
D.2. XHTML 1.1 Schema Modules	29
D.3. XHTML 1.1 Customizations	35
E. Acknowledgements	49

1. Introduction

This section is *normative*.

With the introduction of the XHTML family of modules and document types, the W3C has helped move the Internet content-development community from the days of malformed, non-standard markup into the well formed, valid world of XML [XML [p.13]]. In XHTML 1.0, this move was moderated by a goal of providing for easy migration of existing, HTML 4 (or earlier) based content to XHTML and XML. With the advent of the XHTML modules defined in XHTML Modularization, the W3C has removed support for deprecated elements and attributes from the XHTML family. These elements and attributes were largely presentation oriented functionality that is better handled via style sheets or client-specific default behavior.

Going forward, XHTML family document types will be based upon this new, more structural functional collection. In this specification, the W3C's HTML Working Group has defined an initial document type based solely upon modules. This document type is designed to be portable to a broad collection of client devices, and applicable to the majority of Internet content. Content developers who base their content upon the functionality expressed in this specification can be confident that it will be consistently portable across XHTML family conforming user agents.

2. Conformance Definition

This section is *normative*.

The keywords "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT", "SHOULD", "RECOMMENDED", "MAY", and "OPTIONAL" in this document are to be interpreted as described in [RFC2119] [p.13] .

2.1. Document Conformance

This version of XHTML provides a definition of strictly conforming XHTML documents, which are restricted to elements and attributes from the XHTML namespace.

2.1.1. Strictly Conforming Documents

A strictly conforming XHTML 1.1 document is a document that requires only the facilities described as mandatory in this specification. Such a document **MUST** meet all the following criteria:

1. The document must conform to the constraints expressed in the schemas in Appendix D - XHTML 1.1 Schema [p.27] and Appendix C - XHTML 1.1 Document Type Definition [p.15] .
2. The local part of the root element of the document must be `html`.
3. The start tag of the root element of the document must explicitly contain an `xmlns` declaration for the XHTML namespace [XMLNS [p.??]]. The namespace URI for XHTML is defined to be `http://www.w3.org/1999/xhtml`.

The start tag may also contain an `xsi:schemaLocation` attribute that associates this namespace with the XML Schema at the URI

`http://www.w3.org/MarkUp/SCHEMA/xhtml11.xsd`.

Sample root element

```
<html xmlns="http://www.w3.org/1999/xhtml" xml:lang="en"
      xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
      xsi:schemaLocation="http://www.w3.org/1999/xhtml
                        http://www.w3.org/MarkUp/SCHEMA/xhtml11.xsd"
>
```

4. There **SHOULD** be a DOCTYPE declaration in the document prior to the root element. If present, the public identifier included in the DOCTYPE declaration must reference the DTD found in Appendix F using its Public Identifier. The system identifier may be modified appropriately.

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.1//EN"
"http://www.w3.org/TR/xhtml11/DTD/xhtml11.dtd">
```

5. The start tag **SHOULD** contain a `version` attribute that declares the version of XHTML in use. The version of this version of XHTML is `-//W3C//DTD XHTML 1.1//EN`.

Example of an XHTML 1.1 document

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.1//EN"
"http://www.w3.org/TR/xhtml11/DTD/xhtml11.dtd">
<html version="-//W3C//DTD XHTML 1.1//EN"
xmlns="http://www.w3.org/1999/xhtml" xml:lang="en"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="http://www.w3.org/1999/xhtml
http://www.w3.org/MarkUp/SCHEMA/xhtml11.xsd"
>
  <head>
    <title>Virtual Library</title>
  </head>
  <body>
    <p>Moved to <a href="http://example.org/">example.org</a>.</p>
  </body>
</html>
```

Note that in this example, the XML declaration is included. An XML declaration like the one above is not required in all XML documents. XHTML document authors should use XML declarations in all their documents. XHTML document authors must use an XML declaration when the character encoding of the document is other than the default UTF-8 or UTF-16 and no encoding is specified by a higher-level protocol.

XHTML 1.1 documents **SHOULD** be labeled with the Internet Media Type `"application/xhtml+xml"` as defined in [RFC3236 [p.13]]. For further information on using media types with XHTML, see the informative note [XHTMLMIME [p.13]].

2.2. User Agent Conformance

A conforming user agent **MUST** meet all user agent conformance requirements defined in [XHTMLMOD [p.13]].

3. The XHTML 1.1 Document Type

This section is *normative*.

The XHTML 1.1 document type is a fully functional document type with rich semantics. It is not, however, as varied in functionality as the XHTML 1.0 Transitional or Frameset document types. These document types defined many presentational components that are better handled through style sheets or other similar mechanisms. Moreover, since the XHTML 1.1 document type is based exclusively upon the facilities defined in the XHTML modules [XHTMLMOD [p.13]], it does not contain any of the deprecated functionality of XHTML 1.0 nor of HTML 4. Despite these exceptions, or perhaps because of them, the XHTML 1.1 document type is a solid basis for future document types that are targeted at varied user agent environments.

The XHTML 1.1 document type is made up of the following XHTML modules. The elements, attributes, and minimal content models associated with these modules are defined in "XHTML Modularization" [XHTMLMOD [p.13]]). The elements are listed here for information purposes, but the definitions in "XHTML Modularization" should be considered definitive. In the on-line version of this document, the module names in the list below link into the definitions of the modules within the current version of "XHTML Modularization".

Structure Module*

body, head, html, title

Text Module*

abbr, acronym, address, blockquote, br, cite, code, dfn, div, em, h1, h2, h3, h4, h5, h6, kbd, p, pre, q, samp, span, strong, var

Hypertext Module*

a

List Module*

dl, dt, dd, ol, ul, li

Object Module

object, param

Presentation Module

b, big, hr, i, small, sub, sup, tt

Edit Module

del, ins

Bidirectional Text Module

bdo

Forms Module

button, fieldset, form, input, label, legend, select, optgroup, option, textarea

Table Module

caption, col, colgroup, table, tbody, td, tfoot, th, thead, tr

Image Module

img

Client-side Image Map Module`area, map`**Server-side Image Map Module**`Attribute ismap on img`**Intrinsic Events Module**`Events attributes`**Metainformation Module**`meta`**Scripting Module**`noscript, script`**Stylesheet Module**`style element`**Style Attribute Module *Deprecated***`style attribute`**Link Module**`link`**Base Module**`base`

XHTML also uses the Ruby Annotation module as defined in [RUBY [p.13]]:

Ruby Annotation Module`ruby, rbc, rtc, rb, rt, rp`

There are no additional definitions required by this document type. An implementation of this document type as an XML Schema is defined in Appendix D [p.27] , and as an XML DTD is defined in Appendix C [p.15] .

A. Changes from XHTML 1.0 Strict

This appendix is *informative*.

This Appendix describes the differences between XHTML 1.1 and XHTML 1.0 Strict. XHTML 1.1 represents a departure from both HTML 4 and XHTML 1.0. Most significant is the removal of features that were deprecated. In general, the strategy is to define a markup language that is rich in structural functionality, but that relies upon style sheets for presentation.

The differences can be summarized as follows:

1. On every element, the `lang` attribute has been removed in favor of the `xml:lang` attribute (as defined in [XHTMLMOD [p.13]]).
2. On the `a` and `map` elements, the `name` attribute has been removed in favor of the `id` attribute (as defined in [XHTMLMOD [p.13]]).
3. The "ruby" collection of elements has been added (as defined in [RUBY [p.13]]).

B. References

This appendix is *normative*.

B.1. Normative References

[HTML4]

HTML 4.01 Specification, W3C Recommendation, Dave Raggett, Arnaud Le Hors, Ian Jacobs, 24 December 1999.

See: <http://www.w3.org/TR/1999/REC-html401-19991224>

[XHTML1]

XHTML 1.0: The Extensible HyperText Markup Language (Second Edition), W3C Recommendation, Steven Pemberton, et al., 26 January 2000, revised 1 August 2002.

See: <http://www.w3.org/TR/2002/REC-xhtml1-20020801>

[XHTMLMOD]

XHTML Modularization 1.1, W3C Working Draft, Shane McCarron, et al., 5 July 2006

See: <http://www.w3.org/TR/2006/WD-xhtml-modularization-20060705>

[XML]

Extensible Markup Language (XML) 1.0 (Second Edition), W3C Recommendation, Tim Bray, Jean Paoli, C. M. Sperberg-McQueen, Eve Maler, F. Yergeau, 4 February 2004.

See: <http://www.w3.org/TR/2004/REC-xml-20040204>

[RUBY]

Ruby Annotation, W3C Recommendation, Marcin Sawicki, et al., 31 May 2001.

See: <http://www.w3.org/TR/2001/REC-ruby-20010531>

B.2. Informative References

[CATALOG]

Entity Management: OASIS Technical Resolution 9401:1997 (Amendment 2 to TR 9401), Paul Grosso, Chair, Entity Management Subcommittee, SGML Open, 10 September 1997.

See: <http://www.oasis-open.org/html/a401.htm>

[RFC2119]

"*Key words for use in RFCs to indicate requirement levels*", RFC 2119, S. Bradner, March 1997.

Available at: <http://www.ietf.org/rfc/rfc2119.txt>

[RFC2854]

"The 'text/html' Media Type", D. Connely, L. Masinter, January 2000.

Available at: <http://www.ietf.org/rfc/rfc2854.txt>

[RFC3236]

"The 'application/xhtml+xml' Media Type", M. Baker, P. Stark, January 2002.

Available at: <http://www.ietf.org/rfc/rfc3236.txt>

[XHTMLMIME]

"*XHTML Media Types*", Masayasu Ishikawa, 1 August 2002.

Latest version available at: <http://www.w3.org/TR/xhtml-media-types>

[XMLNAMES]

"*Namespaces in XML*", W3C Recommendation, Tim Bray, Dave Hollander, Andrew Layman, 14 January 1999.

Available at: <http://www.w3.org/TR/1999/REC-xml-names-19990114>

[XMLSCHEMA]

"*XML Schema Part 1: Structures Second Edition*", W3C Recommendation, H. S. Thompson *et al.*, eds., 28 October 2004.

Available at: <http://www.w3.org/TR/2004/REC-xmlschema-1-20041028/>

"*XML Schema Part 2: Datatypes Second Edition*", W3C Recommendation, P. V. Biron, A. Malhotra, eds., 28 October 2004.

Available at: <http://www.w3.org/TR/2004/REC-xmlschema-2-20041028/>

C. XHTML 1.1 Document Type Definition

This appendix is *normative*.

C.1. SGML Open Catalog Entry for XHTML 1.1

This section contains the SGML Open Catalog-format definition [CATALOG [p.13]] of the public identifiers for XHTML 1.1.

```
-- ..... --
-- File catalog ..... --

-- XHTML 1.1 Catalog Data File

Revision:  @(#)xhtml11.cat 1.9 2001/04/04 SMI

See "Entity Management", SGML Open Technical Resolution 9401 for detailed
information on supplying and using catalog data. This document is available
from OASIS at URL:

    <http://www.oasis-open.org/html/tr9401.html>
--

-- ..... --
-- SGML declaration associated with XHTML ..... --

OVERRIDE YES

SGMLDECL "xml1.dcl"

-- :::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::: ::
--
-- XHTML 1.1 DTD modular driver file ..... --
-- note that this uses the local, flattened version of the DTD. If you want
-- your catalog to use the master version of the XHTML Modules, change the
-- entry to reference xhtml11.dtd instead of xhtml11-flat.dtd
--

PUBLIC "-//W3C//DTD XHTML 1.1//EN"                                "xhtml11-flat.dtd"

-- XHTML 1.1 framework modules ..... --

PUBLIC "-//W3C//ENTITIES XHTML 1.1 Document Model 1.0//EN"      "xhtml11-model-1.mod"

-- End of catalog data ..... --
-- ..... --
```

C.2. XHTML 1.1 Driver

This section contains the driver for the XHTML 1.1 document type implementation as an XML DTD. It relies upon XHTML module implementations defined in [XHTMLMOD [p.13]] and in [RUBY [p.13]].

```

<!-- ..... -->
<!-- XHTML 1.1 DTD ..... -->
<!-- file: xhtml11.dtd
-->

<!-- XHTML 1.1 DTD

This is XHTML, a reformulation of HTML as a modular XML application.

The Extensible HyperText Markup Language (XHTML)
Copyright 1998-2007 World Wide Web Consortium
(Massachusetts Institute of Technology, European Research Consortium
for Informatics and Mathematics, Keio University).
All Rights Reserved.

Permission to use, copy, modify and distribute the XHTML DTD and its
accompanying documentation for any purpose and without fee is hereby
granted in perpetuity, provided that the above copyright notice and
this paragraph appear in all copies. The copyright holders make no
representation about the suitability of the DTD for any purpose.

It is provided "as is" without expressed or implied warranty.

Author:      Murray M. Altheim <altheim@eng.sun.com>
Revision:    $Id: xhtml11.dtd,v 1.27 2008/01/23 15:29:18 ahby Exp $

-->
<!-- This is the driver file for version 1.1 of the XHTML DTD.

Please use this public identifier to identify it:

    "-//W3C//DTD XHTML 1.1//EN"
-->
<!ENTITY % XHTML.version "-//W3C//DTD XHTML 1.1//EN" >

<!-- Use this URI to identify the default namespace:

    "http://www.w3.org/1999/xhtml"

See the Qualified Names module for information
on the use of namespace prefixes in the DTD.

Note that XHTML namespace elements are not prefixed by default,
but the XHTML namespace prefix is defined as "xhtml" so that
other markup languages can extend this one and use the XHTML
prefixed global attributes if required.

-->
<!ENTITY % NS.prefixed "IGNORE" >
<!ENTITY % XHTML.prefix "xhtml" >

<!-- Be sure to include prefixed global attributes - we don't need
them, but languages that extend XHTML 1.1 might.
-->
<!ENTITY % XHTML.global.attrs.prefixed "INCLUDE" >

<!-- Reserved for use with the XLink namespace:

```



```

-->
<!ENTITY % XLINK.xmlns "" >
<!ENTITY % XLINK.xmlns.attrib "" >

<!-- For example, if you are using XHTML 1.1 directly, use the public
      identifier in the DOCTYPE declaration, with the namespace declaration
      on the document element to identify the default namespace:

      <?xml version="1.0"?>
      <!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.1//EN"
              "http://www.w3.org/TR/xhtml11/DTD/xhtml11.dtd">
      <html xmlns="http://www.w3.org/1999/xhtml"
            xml:lang="en">
      ...
      </html>

      Revisions:
      (none)
-->

<!-- reserved for future use with document profiles -->
<!ENTITY % XHTML.profile "" >

<!-- ensure XHTML Notations are disabled -->
<!ENTITY % xhtml-notations.module "IGNORE" >

<!-- Bidirectional Text features
      This feature-test entity is used to declare elements
      and attributes used for bidirectional text support.
-->
<!ENTITY % XHTML.bidi "INCLUDE" >

<?doc type="doctype" role="title" { XHTML 1.1 } ?>

<!-- :::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::: -->

<!-- Pre-Framework Redeclaration placeholder ..... -->
<!-- this serves as a location to insert markup declarations
      into the DTD prior to the framework declarations.
-->
<!ENTITY % xhtml-prefw-redecl.module "IGNORE" >
<![%xhtml-prefw-redecl.module;[
%xhtml-prefw-redecl.mod;
<!-- end of xhtml-prefw-redecl.module -->]]>

<!ENTITY % xhtml-events.module "INCLUDE" >

<!-- Inline Style Module ..... -->
<!ENTITY % xhtml-inlstyle.module "INCLUDE" >
<![%xhtml-inlstyle.module;[
<!ENTITY % xhtml-inlstyle.mod
      PUBLIC "-//W3C//ELEMENTS XHTML Inline Style 1.0//EN"
              "http://www.w3.org/Markup/DTD/xhtml-inlstyle-1.mod" >
%xhtml-inlstyle.mod;]]>

<!-- declare Document Model module instantiated in framework
-->

```

```

<!ENTITY % xhtml-model.mod
    PUBLIC "-//W3C//ENTITIES XHTML 1.1 Document Model 1.0//EN"
        "http://www.w3.org/MarkUp/DTD/xhtml111-model-1.mod" >

<!-- Modular Framework Module (required) ..... -->
<!ENTITY % xhtml-framework.module "INCLUDE" >
<![%xhtml-framework.module;[
<!ENTITY % xhtml-framework.mod
    PUBLIC "-//W3C//ENTITIES XHTML Modular Framework 1.0//EN"
        "http://www.w3.org/MarkUp/DTD/xhtml1-framework-1.mod" >
%xhtml-framework.mod;]]>

<!-- Post-Framework Redeclaration placeholder ..... -->
<!-- this serves as a location to insert markup declarations
    into the DTD following the framework declarations.
-->
<!ENTITY % xhtml-postfw-redecl.module "IGNORE" >
<![%xhtml-postfw-redecl.module;[
%xhtml-postfw-redecl.mod;
<!-- end of xhtml-postfw-redecl.module -->]]>

<!-- Text Module (Required) ..... -->
<!ENTITY % xhtml-text.module "INCLUDE" >
<![%xhtml-text.module;[
<!ENTITY % xhtml-text.mod
    PUBLIC "-//W3C//ELEMENTS XHTML Text 1.0//EN"
        "http://www.w3.org/MarkUp/DTD/xhtml1-text-1.mod" >
%xhtml-text.mod;]]>

<!-- Hypertext Module (required) ..... -->
<!ENTITY % xhtml-hypertext.module "INCLUDE" >
<![%xhtml-hypertext.module;[
<!ENTITY % xhtml-hypertext.mod
    PUBLIC "-//W3C//ELEMENTS XHTML Hypertext 1.0//EN"
        "http://www.w3.org/MarkUp/DTD/xhtml1-hypertext-1.mod" >
%xhtml-hypertext.mod;]]>

<!-- Lists Module (required) ..... -->
<!ENTITY % xhtml-list.module "INCLUDE" >
<![%xhtml-list.module;[
<!ENTITY % xhtml-list.mod
    PUBLIC "-//W3C//ELEMENTS XHTML Lists 1.0//EN"
        "http://www.w3.org/MarkUp/DTD/xhtml1-list-1.mod" >
%xhtml-list.mod;]]>

<!-- :::::::::::::::::::::::::::::::::::::::::::::::::::::::::::: -->

<!-- Edit Module ..... -->
<!ENTITY % xhtml-edit.module "INCLUDE" >
<![%xhtml-edit.module;[
<!ENTITY % xhtml-edit.mod
    PUBLIC "-//W3C//ELEMENTS XHTML Editing Elements 1.0//EN"
        "http://www.w3.org/MarkUp/DTD/xhtml1-edit-1.mod" >
%xhtml-edit.mod;]]>

<!-- BIDI Override Module ..... -->
<!ENTITY % xhtml-bdo.module "%XHTML.bidi;" >

```

```

<![%xhtml-bdo.module;[
<!ENTITY % xhtml-bdo.mod
    PUBLIC "-//W3C//ELEMENTS XHTML BIDI Override Element 1.0//EN"
        "http://www.w3.org/MarkUp/DTD/xhtml-bdo-1.mod" >
%xhtml-bdo.mod;]]>

<!-- Ruby Module ..... -->
<!ENTITY % Ruby.common.attlists "INCLUDE" >
<!ENTITY % Ruby.common.attrib "%Common.attrib;" >
<!ENTITY % xhtml-ruby.module "INCLUDE" >
<![%xhtml-ruby.module;[
<!ENTITY % xhtml-ruby.mod
    PUBLIC "-//W3C//ELEMENTS XHTML Ruby 1.0//EN"
        "http://www.w3.org/TR/ruby/xhtml-ruby-1.mod" >
%xhtml-ruby.mod;]]>

<!-- Presentation Module ..... -->
<!ENTITY % xhtml-pres.module "INCLUDE" >
<![%xhtml-pres.module;[
<!ENTITY % xhtml-pres.mod
    PUBLIC "-//W3C//ELEMENTS XHTML Presentation 1.0//EN"
        "http://www.w3.org/MarkUp/DTD/xhtml-pres-1.mod" >
%xhtml-pres.mod;]]>

<!-- Link Element Module ..... -->
<!ENTITY % xhtml-link.module "INCLUDE" >
<![%xhtml-link.module;[
<!ENTITY % xhtml-link.mod
    PUBLIC "-//W3C//ELEMENTS XHTML Link Element 1.0//EN"
        "http://www.w3.org/MarkUp/DTD/xhtml-link-1.mod" >
%xhtml-link.mod;]]>

<!-- Document Metainformation Module ..... -->
<!ENTITY % xhtml-meta.module "INCLUDE" >
<![%xhtml-meta.module;[
<!ENTITY % xhtml-meta.mod
    PUBLIC "-//W3C//ELEMENTS XHTML Metainformation 1.0//EN"
        "http://www.w3.org/MarkUp/DTD/xhtml-meta-1.mod" >
%xhtml-meta.mod;]]>

<!-- Base Element Module ..... -->
<!ENTITY % xhtml-base.module "INCLUDE" >
<![%xhtml-base.module;[
<!ENTITY % xhtml-base.mod
    PUBLIC "-//W3C//ELEMENTS XHTML Base Element 1.0//EN"
        "http://www.w3.org/MarkUp/DTD/xhtml-base-1.mod" >
%xhtml-base.mod;]]>

<!-- Scripting Module ..... -->
<!ENTITY % xhtml-script.module "INCLUDE" >
<![%xhtml-script.module;[
<!ENTITY % xhtml-script.mod
    PUBLIC "-//W3C//ELEMENTS XHTML Scripting 1.0//EN"
        "http://www.w3.org/MarkUp/DTD/xhtml-script-1.mod" >
%xhtml-script.mod;]]>

<!-- Style Sheets Module ..... -->

```

```

<!ENTITY % xhtml-style.module "INCLUDE" >
<![%xhtml-style.module;[
<!ENTITY % xhtml-style.mod
    PUBLIC "-//W3C//ELEMENTS XHTML Style Sheets 1.0//EN"
        "http://www.w3.org/MarkUp/DTD/xhtml-style-1.mod" >
%xhtml-style.mod;]]>

<!-- Image Module ..... -->
<!ENTITY % xhtml-image.module "INCLUDE" >
<![%xhtml-image.module;[
<!ENTITY % xhtml-image.mod
    PUBLIC "-//W3C//ELEMENTS XHTML Images 1.0//EN"
        "http://www.w3.org/MarkUp/DTD/xhtml-image-1.mod" >
%xhtml-image.mod;]]>

<!-- Client-side Image Map Module ..... -->
<!ENTITY % xhtml-csismap.module "INCLUDE" >
<![%xhtml-csismap.module;[
<!ENTITY % xhtml-csismap.mod
    PUBLIC "-//W3C//ELEMENTS XHTML Client-side Image Maps 1.0//EN"
        "http://www.w3.org/MarkUp/DTD/xhtml-csismap-1.mod" >
%xhtml-csismap.mod;]]>

<!-- Server-side Image Map Module ..... -->
<!ENTITY % xhtml-ssismap.module "INCLUDE" >
<![%xhtml-ssismap.module;[
<!ENTITY % xhtml-ssismap.mod
    PUBLIC "-//W3C//ELEMENTS XHTML Server-side Image Maps 1.0//EN"
        "http://www.w3.org/MarkUp/DTD/xhtml-ssismap-1.mod" >
%xhtml-ssismap.mod;]]>

<!-- Param Element Module ..... -->
<!ENTITY % xhtml-param.module "INCLUDE" >
<![%xhtml-param.module;[
<!ENTITY % xhtml-param.mod
    PUBLIC "-//W3C//ELEMENTS XHTML Param Element 1.0//EN"
        "http://www.w3.org/MarkUp/DTD/xhtml-param-1.mod" >
%xhtml-param.mod;]]>

<!-- Embedded Object Module ..... -->
<!ENTITY % xhtml-object.module "INCLUDE" >
<![%xhtml-object.module;[
<!ENTITY % xhtml-object.mod
    PUBLIC "-//W3C//ELEMENTS XHTML Embedded Object 1.0//EN"
        "http://www.w3.org/MarkUp/DTD/xhtml-object-1.mod" >
%xhtml-object.mod;]]>

<!-- Inputmode Attribute Module ..... -->
<!ENTITY % xhtml-inputmode.module "INCLUDE" >
<![%xhtml-inputmode.module;[
<!ENTITY % xhtml-inputmode.mod
    PUBLIC "-//W3C//ELEMENTS XHTML Inputmode 1.0//EN"
        "http://www.w3.org/MarkUp/DTD/xhtml-inputmode-1.mod" >
%xhtml-inputmode.mod;]]>

<!-- Tables Module ..... -->
<!ENTITY % xhtml-table.module "INCLUDE" >

```

```

<![%xhtml-table.module;[
<!ENTITY % xhtml-table.mod
    PUBLIC "-//W3C//ELEMENTS XHTML Tables 1.0//EN"
        "http://www.w3.org/MarkUp/DTD/xhtml-table-1.mod" >
%xhtml-table.mod;]]>

<!-- Forms Module ..... -->
<!ENTITY % xhtml-form.module "INCLUDE" >
<![%xhtml-form.module;[
<!ENTITY % xhtml-form.mod
    PUBLIC "-//W3C//ELEMENTS XHTML Forms 1.0//EN"
        "http://www.w3.org/MarkUp/DTD/xhtml-form-1.mod" >
%xhtml-form.mod;]]>

<!-- Target Attribute Module ..... -->
<!ENTITY % xhtml-target.module "INCLUDE" >
<![%xhtml-target.module;[
<!ENTITY % xhtml-target.mod
    PUBLIC "-//W3C//ELEMENTS XHTML Target 1.0//EN"
        "http://www.w3.org/MarkUp/DTD/xhtml-target-1.mod" >
%xhtml-target.mod;]]>

<!-- Legacy Markup ..... -->
<!ENTITY % xhtml-legacy.module "IGNORE" >
<![%xhtml-legacy.module;[
<!ENTITY % xhtml-legacy.mod
    PUBLIC "-//W3C//ELEMENTS XHTML Legacy Markup 1.0//EN"
        "http://www.w3.org/MarkUp/DTD/xhtml-legacy-1.mod" >
%xhtml-legacy.mod;]]>

<!-- Document Structure Module (required) ..... -->
<!ENTITY % xhtml-struct.module "INCLUDE" >
<![%xhtml-struct.module;[
<!ENTITY % xhtml-struct.mod
    PUBLIC "-//W3C//ELEMENTS XHTML Document Structure 1.0//EN"
        "http://www.w3.org/MarkUp/DTD/xhtml-struct-1.mod" >
%xhtml-struct.mod;]]>

<!-- end of XHTML 1.1 DTD ..... -->
<!-- ..... -->

```

C.3. XHTML 1.1 Customizations

An XHTML Family Document Type (such as XHTML 1.1) must define the content model that it uses. This is done through a separate content model module that is instantiated by the XHTML Modular Framework. The content model module and the XHTML 1.1 Driver (above) work together to customize the module implementations to the document type's specific requirements. The content model module for XHTML 1.1 is defined below:

```

<!-- ..... -->
<!-- XHTML 1.1 Document Model Module ..... -->
<!-- file: xhtml11-model-1.mod

```

This is XHTML 1.1, a reformulation of HTML as a modular XML application.
Copyright 1998-2007 W3C (MIT, ERCIM, Keio), All Rights Reserved.

```

Revision: $Id: xhtml11-model-1.mod,v 1.15 2007/02/15 21:16:31 ahby Exp $ SMI

This DTD module is identified by the PUBLIC and SYSTEM identifiers:

    PUBLIC "-//W3C//ENTITIES XHTML 1.1 Document Model 1.0//EN"
    SYSTEM "http://www.w3.org/MarkUp/DTD/xhtml11-model-1.mod"

Revisions:
(none)
..... -->

<!-- XHTML 1.1 Document Model

This module describes the groupings of elements that make up
common content models for XHTML elements.

XHTML has three basic content models:

    %Inline.mix;   character-level elements
    %Block.mix;   block-like elements, eg., paragraphs and lists
    %Flow.mix;    any block or inline elements

Any parameter entities declared in this module may be used
to create element content models, but the above three are
considered 'global' (insofar as that term applies here).

The reserved word '#PCDATA' (indicating a text string) is now
included explicitly with each element declaration that is
declared as mixed content, as XML requires that this token
occur first in a content model specification.

-->
<!-- Extending the Model

While in some cases this module may need to be rewritten to
accommodate changes to the document model, minor extensions
may be accomplished by redeclaring any of the three *.extra;
parameter entities to contain extension element types as follows:

    %Misc.extra;   whose parent may be any block or
                   inline element.

    %Inline.extra; whose parent may be any inline element.

    %Block.extra;  whose parent may be any block element.

If used, these parameter entities must be an OR-separated
list beginning with an OR separator ("|"), eg., "| a | b | c"

All block and inline *.class parameter entities not part
of the *struct.class classes begin with "|" to allow for
exclusion from mixes.

-->

<!-- ..... Optional Elements in head ..... -->

<!ENTITY % HeadOpts.mix
    "( %script.qname; | %style.qname; | %meta.qname;

```

```

    | %link.qname; | %object.qname; )"
>

<!-- ..... Miscellaneous Elements ..... -->

<!-- ins and del are used to denote editing changes
-->
<!ENTITY % Edit.class " | %ins.qname; | %del.qname;" >

<!-- script and noscript are used to contain scripts
and alternative content
-->
<!ENTITY % Script.class " | %script.qname; | %noscript.qname;" >

<!ENTITY % Misc.extra "" >

<!-- These elements are neither block nor inline, and can
essentially be used anywhere in the document body.
-->
<!ENTITY % Misc.class
    "%Edit.class;
    %Script.class;
    %Misc.extra;"
>

<!-- ..... Inline Elements ..... -->

<!ENTITY % InlStruct.class "%br.qname; | %span.qname;" >

<!ENTITY % InlPhras.class
    " | %em.qname; | %strong.qname; | %dfn.qname; | %code.qname;
    | %samp.qname; | %kbd.qname; | %var.qname; | %cite.qname;
    | %abbr.qname; | %acronym.qname; | %q.qname;" >

<!ENTITY % InlPres.class
    " | %tt.qname; | %i.qname; | %b.qname; | %big.qname;
    | %small.qname; | %sub.qname; | %sup.qname;" >

<!ENTITY % Il8n.class " | %bdo.qname;" >

<!ENTITY % Anchor.class " | %a.qname;" >

<!ENTITY % InlSpecial.class
    " | %img.qname; | %map.qname;
    | %object.qname;" >

<!ENTITY % InlForm.class
    " | %input.qname; | %select.qname; | %textarea.qname;
    | %label.qname; | %button.qname;" >

<!ENTITY % Inline.extra "" >

<!ENTITY % Ruby.class " | %ruby.qname;" >

<!-- %Inline.class; includes all inline elements,
used as a component in mixes
-->

```

```

<!ENTITY % Inline.class
    "%InlStruct.class;
    %InlPhras.class;
    %InlPres.class;
    %I18n.class;
    %Anchor.class;
    %InlSpecial.class;
    %InlForm.class;
    %Ruby.class;
    %Inline.extra;"
>

<!-- %InlNoRuby.class; includes all inline elements
    except ruby, used as a component in mixes
-->
<!ENTITY % InlNoRuby.class
    "%InlStruct.class;
    %InlPhras.class;
    %InlPres.class;
    %I18n.class;
    %Anchor.class;
    %InlSpecial.class;
    %InlForm.class;
    %Inline.extra;"
>

<!-- %NoRuby.content; includes all inlines except ruby
-->
<!ENTITY % NoRuby.content
    "( #PCDATA
    | %InlNoRuby.class;
    %Misc.class; )"
>

<!-- %InlNoAnchor.class; includes all non-anchor inlines,
    used as a component in mixes
-->
<!ENTITY % InlNoAnchor.class
    "%InlStruct.class;
    %InlPhras.class;
    %InlPres.class;
    %I18n.class;
    %InlSpecial.class;
    %InlForm.class;
    %Ruby.class;
    %Inline.extra;"
>

<!-- %InlNoAnchor.mix; includes all non-anchor inlines
-->
<!ENTITY % InlNoAnchor.mix
    "%InlNoAnchor.class;
    %Misc.class;"
>

<!-- %Inline.mix; includes all inline elements, including %Misc.class;
-->

```



```

<!ENTITY % Inline.mix
    "%Inline.class;
    %Misc.class;"
>

<!-- ..... Block Elements ..... -->

<!-- In the HTML 4.0 DTD, heading and list elements were included
in the %block; parameter entity. The %Heading.class; and
%List.class; parameter entities must now be included explicitly
on element declarations where desired.
-->

<!ENTITY % Heading.class
    "%h1.qname; | %h2.qname; | %h3.qname;
    | %h4.qname; | %h5.qname; | %h6.qname;" >

<!ENTITY % List.class "%ul.qname; | %ol.qname; | %dl.qname;" >

<!ENTITY % Table.class "| %table.qname;" >

<!ENTITY % Form.class "| %form.qname;" >

<!ENTITY % Fieldset.class "| %fieldset.qname;" >

<!ENTITY % BlkStruct.class "%p.qname; | %div.qname;" >

<!ENTITY % BlkPhras.class
    "| %pre.qname; | %blockquote.qname; | %address.qname;" >

<!ENTITY % BlkPres.class "| %hr.qname;" >

<!ENTITY % BlkSpecial.class
    "%Table.class;
    %Form.class;
    %Fieldset.class;"
>

<!ENTITY % Block.extra "" >

<!-- %Block.class; includes all block elements,
used as an component in mixes
-->
<!ENTITY % Block.class
    "%BlkStruct.class;
    %BlkPhras.class;
    %BlkPres.class;
    %BlkSpecial.class;
    %Block.extra;"
>

<!-- %Block.mix; includes all block elements plus %Misc.class;
-->
<!ENTITY % Block.mix
    "%Heading.class;
    | %List.class;
    | %Block.class;

```

```
        %Misc.class;"
>

<!-- ..... All Content Elements ..... -->

<!-- %Flow.mix; includes all text content, block and inline
-->
<!ENTITY % Flow.mix
    "%Heading.class;
    | %List.class;
    | %Block.class;
    | %Inline.class;
    %Misc.class;"
>

<!-- end of xhtml11-model-1.mod -->
```

D. XHTML 1.1 XML Schema Definition

This appendix is *normative*.

D.1. XHTML 1.1 Schema Driver

This section contains the driver for the XHTML 1.1 document type implementation as an XML Schema. It relies upon XHTML module implementations defined in [XHTMLMOD [p.13]] and in [RUBY [p.13]].

```
<?xml version="1.0" encoding="UTF-8"?>
<xs:schema
  xmlns:xs="http://www.w3.org/2001/XMLSchema"
  targetNamespace="http://www.w3.org/1999/xhtml"
  xmlns:xhtml="http://www.w3.org/1999/xhtml/datatypes/"
  xmlns="http://www.w3.org/1999/xhtml"
  elementFormDefault="qualified" >
  <xs:annotation>
    <xs:documentation>
      This is the XML Schema driver for XHTML 1.1.
      Please use this namespace for XHTML elements:

        "http://www.w3.org/1999/xhtml"

      $Id: xhtml11.xsd,v 1.6 2007/02/22 13:02:52 ahby Exp $
    </xs:documentation>
    <xs:documentation source="xhtml-copyright-1.xsd"/>
  </xs:annotation>
  <xs:annotation>
    <xs:documentation>
      This is XHTML, a reformulation of HTML as a modular XML application
      The Extensible HyperText Markup Language (XHTML)
      Copyright ©1998-2007 World Wide Web Consortium
      (Massachusetts Institute of Technology, European Research Consortium
       for Informatics and Mathematics, Keio University).
      All Rights Reserved.

      Permission to use, copy, modify and distribute the XHTML Schema
      modules and their accompanying xs:documentation for any purpose
      and without fee is hereby granted in perpetuity, provided that the above
      copyright notice and this paragraph appear in all copies.
      The copyright holders make no representation about the suitability of
      these XML Schema modules for any purpose.

      They are provided "as is" without expressed or implied warranty.
    </xs:documentation>
  </xs:annotation>
  <xs:annotation>
    <xs:documentation>
      This is the Schema Driver file for XHTML1.1
      Document Type

      This schema
      + imports external schemas (xml.xsd)
```

- + refedines (and include)s schema modules for XHTML1.1 Document Type.
- + includes Schema for Named content model for the XHTML1.1 Document Type

XHTML1.1 Document Type includes the following Modules

XHTML Core modules (Required for XHTML Family Conformance)

- + text
- + hypertext
- + lists
- + structure

Other XHTML modules

- + Edit
- + Bdo
- + Presentational
- + Link
- + Meta
- + Base
- + Scripting
- + Style
- + Image
- + Applet
- + Object
- + Param (Applet/Object modules require Param Module)
- + Tables
- + Forms
- + Client side image maps
- + Server side image maps
- + Ruby

</xs:documentation>

</xs:annotation>

<xs:import

namespace="http://www.w3.org/XML/1998/namespace"

schemaLocation="http://www.w3.org/2001/xml.xsd">

<xs:annotation>

<xs:documentation>

This import brings in the XML namespace attributes

The XML attributes are used by various modules.

</xs:documentation>

</xs:annotation>

</xs:import>

<xs:include

schemaLocation="xhtml11-model-1.xsd">

<xs:annotation>

<xs:documentation>

Document Model module for the XHTML1.1 Document Type.

This schema file defines all named models used by XHTML

Modularization Framework for XHTML1.1 Document Type

</xs:documentation>

</xs:annotation>

</xs:include>

<xs:import

namespace="http://www.w3.org/1999/xhtml/datatypes/"

schemaLocation="xhtml-datatypes-1.xsd"/>

<xs:include

schemaLocation="xhtml11-modules-1.xsd">

<xs:annotation>

<xs:documentation>

```

        Schema that includes all modules (and redefinitions)
        for XHTML1.1 Document Type.
    </xs:documentation>
</xs:annotation>
</xs:include>
</xs:schema>

```

D.2. XHTML 1.1 Schema Modules

XHTML Family implementations using XML Schema are required to provide their own schema module that imports the required modules from XHTML Modularization.

```

<?xml version="1.0" encoding="UTF-8"?>
<xs:schema xmlns:xs="http://www.w3.org/2001/XMLSchema"
  elementFormDefault="qualified"
  xmlns:xhtml="http://www.w3.org/1999/xhtml/datatypes/" >
  <xs:import namespace="http://www.w3.org/1999/xhtml/datatypes/"
    schemaLocation="xhtml-datatypes-1.xsd" />

  <xs:annotation>
    <xs:documentation>
      This schema includes all modules for XHTML1.1 Document Type.
      $Id: xhtml11-modules-1.xsd,v 1.4 2007/02/22 13:02:52 ahby Exp $
    </xs:documentation>
    <xs:documentation source="xhtml-copyright-1.xsd"/>
  </xs:annotation>
  <xs:annotation>
    <xs:documentation>
      This schema includes all modules (and redefinitions)
      for XHTML1.1 Document Type.
      XHTML1.1 Document Type includes the following Modules

      XHTML Core modules (Required for XHTML Family Conformance)
      + text
      + hypertext
      + lists
      + structure

      Other XHTML modules
      + Edit
      + Bdo
      + Presentational
      + Link
      + Meta
      + Base
      + Scripting
      + Style
      + Image
      + Applet
      + Object
      + Param (Applet/Object modules require Param Module)
      + Tables
      + Target
      + Forms
      + Client side image maps
      + Server side image maps

    </xs:documentation>
  </xs:annotation>
  <xs:include schemaLocation="xhtml-framework-1.xsd">
    <xs:annotation>
      <xs:documentation>
        Schema Framework Component Modules:
        + notations
        + datatypes
        + common attributes
        + character entities
      </xs:documentation>
      <xs:documentation source="http://www.w3.org/TR/xhtml-modularization/abstract_modules.html#s_commonatts"/>
    </xs:annotation>
  </xs:include>
  <xs:include schemaLocation="xhtml-text-1.xsd">
    <xs:annotation>
      <xs:documentation>
        Text module

        The Text module includes declarations for all core
        text container elements and their attributes.

        + block phrasal
        + block structural
        + inline phrasal
        + inline structural

        Elements defined here:
      </xs:documentation>
    </xs:annotation>
  </xs:include>

```

```

    * address, blockquote, pre, h1, h2, h3, h4, h5, h6
    * div, p
    * abbr, acronym, cite, code, dfn, em, kbd, q, samp, strong, var
    * br, span
</xs:documentation>
  <xs:documentation source="http://www.w3.org/TR/2001/REC-xhtml-modularization-20010410/abstract_modules.html#s_textmodule"/>
</xs:annotation>
</xs:include>
<xs:redefine schemaLocation="xhtml-hypertext-1.xsd">
  <xs:documentation>
    <xs:documentation>
      Hypertext module

      Elements defined here:
      * a
    </xs:documentation>
    <xs:documentation source="http://www.w3.org/TR/2001/REC-xhtml-modularization-20010410/abstract_modules.html#s_hypertextmodule"/>
  </xs:annotation>
  <xs:attributeGroup name="xhtml.a.attlist">
    <xs:attributeGroup ref="xhtml.a.attlist"/>
    <xs:attributeGroup ref="xhtml.a.csim.attlist">
      <xs:annotation>
        <xs:documentation>
          Redefinition by Client Side Image Map Module
        </xs:documentation>
      </xs:annotation>
    </xs:attributeGroup>
    <xs:attributeGroup ref="xhtml.a.events.attlist">
      <xs:annotation>
        <xs:documentation>
          Redefinition by XHTML Event Attribute Module
        </xs:documentation>
      </xs:annotation>
    </xs:attributeGroup>
    <xs:attributeGroup ref="xhtml.a.target.attlist">
      <xs:annotation>
        <xs:documentation>
          Target Module - A Attribute Additions
        </xs:documentation>
      </xs:annotation>
    </xs:attributeGroup>
  </xs:redefine>
<xs:include schemaLocation="xhtml-list-1.xsd">
  <xs:annotation>
    <xs:documentation>
      Lists module

      Elements defined here:
      * dt, dd, dl, ol, ul, li
    </xs:documentation>
    <xs:documentation source="http://www.w3.org/TR/2001/REC-xhtml-modularization-20010410/abstract_modules.html#s_listmodule"/>
  </xs:annotation>
</xs:include>
<xs:redefine schemaLocation="xhtml-struct-1.xsd">
  <xs:annotation>
    <xs:documentation>
      Structural module

      Elements defined here:
      * title, head, body, html
    </xs:documentation>
    <xs:documentation source="http://www.w3.org/TR/2001/REC-xhtml-modularization-20010410/abstract_modules.html#s_structurmodule"/>
  </xs:annotation>
  <xs:attributeGroup name="xhtml.version.attrib">
    <xs:annotation>
      <xs:documentation>
        Redefinition by the XHTML11 Markup (for value of version attr)
      </xs:documentation>
    </xs:annotation>
    <xs:attribute name="version" type="xh1ld:FPI" fixed="-//W3C//DTD XHTML 1.1//EN"/>
  </xs:attributeGroup>
  <xs:attributeGroup name="xhtml.body.attlist">
    <xs:attributeGroup ref="xhtml.body.attlist">
      <xs:annotation>
        <xs:documentation>
          Original Body Attlist
        </xs:documentation>
      </xs:annotation>
    </xs:attributeGroup>
    <xs:attributeGroup ref="xhtml.body.events.attlist">
      <xs:annotation>
        <xs:documentation>
          Redefinition by XHTML Event Attribute Module
        </xs:documentation>
      </xs:annotation>
    </xs:attributeGroup>
  </xs:attributeGroup>
</xs:redefine>
<xs:include schemaLocation="xhtml-edit-1.xsd">
  <xs:annotation>
    <xs:documentation>
      Edit module

      Elements defined here:
      * ins, del

```

```

</xs:documentation>
  <xs:documentation source="http://www.w3.org/TR/xhtml-modularization/abstract_modules.html#s_editmodule"/>
</xs:annotation>
</xs:include>
<xs:include schemaLocation="xhtml-bdo-1.xsd">
  <xs:annotation>
    <xs:documentation>
      Bidirectional element module

      Elements defined here:
      * bdo
    </xs:documentation>
    <xs:documentation source="http://www.w3.org/TR/xhtml-modularization/abstract_modules.html#s_bdomodule"/>
  </xs:annotation>
</xs:include>
<xs:include schemaLocation="xhtml-pres-1.xsd">
  <xs:annotation>
    <xs:documentation>
      Presentational module

      Elements defined here:
      * hr, b, big, i, small, sub, sup, tt
    </xs:documentation>
    <xs:documentation source="http://www.w3.org/TR/xhtml-modularization/abstract_modules.html#s_presentationmodule"/>
  </xs:annotation>
</xs:include>
<xs:include schemaLocation="xhtml-link-1.xsd">
  <xs:annotation>
    <xs:documentation>
      Link module

      Elements defined here:
      * link
    </xs:documentation>
    <xs:documentation source="http://www.w3.org/TR/xhtml-modularization/abstract_modules.html#s_linkmodule"/>
  </xs:annotation>
  <xs:attributeGroup name="xhtml.link.attlist">
    <xs:annotation>
      <xs:documentation>
        Changes to XHTML Link Attlist
      </xs:documentation>
    </xs:annotation>
    <xs:attributeGroup ref="xhtml.link.attlist">
      <xs:annotation>
        <xs:documentation>
          Original Link Attributes (declared in Link Module)
        </xs:documentation>
      </xs:annotation>
    </xs:attributeGroup>
    <xs:attributeGroup ref="xhtml.link.target.attlist">
      <xs:annotation>
        <xs:documentation>
          XHTML Target Module - Attribute additions
        </xs:documentation>
      </xs:annotation>
    </xs:attributeGroup>
  </xs:attributeGroup>
</xs:include>
<xs:include schemaLocation="xhtml-meta-1.xsd">
  <xs:annotation>
    <xs:documentation>
      Meta module

      Elements defined here:
      * meta
    </xs:documentation>
    <xs:documentation source="http://www.w3.org/TR/xhtml-modularization/abstract_modules.html#s_metamodule"/>
  </xs:annotation>
</xs:include>
<xs:include schemaLocation="xhtml-base-1.xsd">
  <xs:annotation>
    <xs:documentation>
      Base module

      Elements defined here:
      * base
    </xs:documentation>
    <xs:documentation source="http://www.w3.org/TR/xhtml-modularization/abstract_modules.html#s_basemodule"/>
  </xs:annotation>
  <xs:attributeGroup name="xhtml.base.attlist">
    <xs:annotation>
      <xs:documentation>
        Changes to XHTML base Attlist
      </xs:documentation>
    </xs:annotation>
    <xs:attributeGroup ref="xhtml.base.attlist">
      <xs:annotation>
        <xs:documentation>
          Original Base Attributes (declared in Base Module)
        </xs:documentation>
      </xs:annotation>
    </xs:attributeGroup>
    <xs:attributeGroup ref="xhtml.base.target.attlist">
      <xs:annotation>
        <xs:documentation>
          XHTML Target Module - Attribute additions

```

```

        </xs:documentation>
        </xs:annotation>
      </xs:attributeGroup>
    </xs:attributeGroup>
  </xs:include>
  <xs:include schemaLocation="xhtml-script-1.xsd">
    <xs:annotation>
      <xs:documentation>
        Scripting module

        Elements defined here:
        * script, noscript
      </xs:documentation>
      <xs:documentation source="http://www.w3.org/TR/xhtml-modularization/abstract_modules.html#s_scriptmodule"/>
    </xs:annotation>
  </xs:include>
  <xs:include schemaLocation="xhtml-style-1.xsd">
    <xs:annotation>
      <xs:documentation>
        Style module

        Elements defined here:
        * style
      </xs:documentation>
      <xs:documentation source="http://www.w3.org/TR/xhtml-modularization/abstract_modules.html#s_stylemodule"/>
    </xs:annotation>
  </xs:include>
  <xs:include schemaLocation="xhtml-instyle-1.xsd">
    <xs:annotation>
      <xs:documentation>
        Style attribute module

        Attribute defined here:
        * style
      </xs:documentation>
      <xs:documentation source="http://www.w3.org/TR/xhtml-modularization/abstract_modules.html#s_styleattributemodule"/>
    </xs:annotation>
  </xs:include>
  <xs:redefine schemaLocation="xhtml-image-1.xsd">
    <xs:annotation>
      <xs:documentation>
        Image module

        Elements defined here:
        * img
      </xs:documentation>
      <xs:documentation source="http://www.w3.org/TR/xhtml-modularization/abstract_modules.html#s_imagemodule"/>
    </xs:annotation>
    <xs:attributeGroup name="xhtml.img.attlist">
      <xs:attributeGroup ref="xhtml.img.attlist">
        <xs:annotation>
          <xs:documentation>
            Original Image Attributes (in Image Module)
          </xs:documentation>
        </xs:annotation>
      </xs:attributeGroup>
      <xs:attributeGroup ref="xhtml.img.csimg.attlist">
        <xs:annotation>
          <xs:documentation>
            Redefinition by Client Side Image Map Module
          </xs:documentation>
        </xs:annotation>
      </xs:attributeGroup>
      <xs:attributeGroup ref="xhtml.img.ssimap.attlist">
        <xs:annotation>
          <xs:documentation>
            Redefinition by Server Side Image Module
          </xs:documentation>
        </xs:annotation>
      </xs:attributeGroup>
    </xs:attributeGroup>
  </xs:redefine>
  <xs:redefine schemaLocation="xhtml-csismap-1.xsd">
    <xs:annotation>
      <xs:documentation>
        Client-side image maps module

        Elements defined here:
        * area, map
      </xs:documentation>
      <xs:documentation source="http://www.w3.org/TR/xhtml-modularization/abstract_modules.html#s_imapmodule"/>
    </xs:annotation>
    <xs:attributeGroup name="xhtml.area.attlist">
      <xs:attributeGroup ref="xhtml.area.attlist">
        <xs:annotation>
          <xs:documentation>
            Original Area Attributes (in CSI Module)
          </xs:documentation>
        </xs:annotation>
      </xs:attributeGroup>
      <xs:attributeGroup ref="xhtml.area.events.attlist">
        <xs:annotation>
          <xs:documentation>
            Redefinition by Events Attribute Module
          </xs:documentation>
        </xs:annotation>
      </xs:attributeGroup>
    </xs:attributeGroup>
  </xs:redefine>

```



```

        </xs:attributeGroup>
        <xs:attributeGroup ref="xhtml.area.target.attlist">
            <xs:annotation>
                <xs:documentation>
                    Target Module - Area Attribute Additions
                </xs:documentation>
            </xs:annotation>
        </xs:attributeGroup>
    </xs:attributeGroup>
</xs:redefine>
<xs:include schemaLocation="xhtml-ssismap-1.xsd">
    <xs:annotation>
        <xs:documentation>
            Server-side image maps module

            Attributes defined here:
            * ismap on img
        </xs:documentation>
        <xs:documentation source="http://www.w3.org/TR/xhtml-modularization/abstract_modules.html#s_servermapmodule"/>
    </xs:annotation>
</xs:include>
<xs:redefine schemaLocation="xhtml-object-1.xsd">
    <xs:annotation>
        <xs:documentation>
            Object module

            Elements defined here:
            * object
        </xs:documentation>
        <xs:documentation source="http://www.w3.org/TR/xhtml-modularization/abstract_modules.html#s_objectmodule"/>
    </xs:annotation>
    <xs:attributeGroup name="xhtml.object.attlist">
        <xs:attributeGroup ref="xhtml.object.attlist">
            <xs:annotation>
                <xs:documentation>
                    Original Object Attlist
                </xs:documentation>
            </xs:annotation>
        </xs:attributeGroup>
        <xs:attributeGroup ref="xhtml.object.csim.attlist">
            <xs:annotation>
                <xs:documentation>
                    Redefinition by Client Image Map Module
                </xs:documentation>
            </xs:annotation>
        </xs:attributeGroup>
    </xs:attributeGroup>
</xs:redefine>
<xs:include schemaLocation="xhtml-param-1.xsd">
    <xs:annotation>
        <xs:documentation>
            Param module

            Elements defined here:
            * param
        </xs:documentation>
    </xs:annotation>
</xs:include>
<xs:include schemaLocation="xhtml-table-1.xsd">
    <xs:annotation>
        <xs:documentation>
            Tables module

            Elements defined here:
            * table, caption, thead, tfoot, tbody, colgroup, col, tr, th, td
        </xs:documentation>
        <xs:documentation source="http://www.w3.org/TR/xhtml-modularization/abstract_modules.html#s_tablemodule"/>
    </xs:annotation>
</xs:include>
<xs:redefine schemaLocation="xhtml-form-1.xsd">
    <xs:annotation>
        <xs:documentation>
            Forms module

            Elements defined here:
            * form, label, input, select, optgroup, option,
            * textarea, fieldset, legend, button
        </xs:documentation>
        <xs:documentation source="http://www.w3.org/TR/xhtml-modularization/abstract_modules.html#s_extformsmodule"/>
    </xs:annotation>
    <xs:attributeGroup name="xhtml.form.attlist">
        <xs:annotation>
            <xs:documentation>
                Changes to XHTML Form Attlist
            </xs:documentation>
        </xs:annotation>
        <xs:attributeGroup ref="xhtml.form.attlist">
            <xs:annotation>
                <xs:documentation>
                    Original Form Attributes (declared in Forms Module)
                </xs:documentation>
            </xs:annotation>
        </xs:attributeGroup>
        <xs:attributeGroup ref="xhtml.form.events.attlist">
            <xs:annotation>
                <xs:documentation>

```

```

        XHTML Events Module - Attribute additions
      </xs:documentation>
    </xs:annotation>
  </xs:attributeGroup>
  <xs:attributeGroup ref="xhtml.form.target.attlist">
    <xs:annotation>
      <xs:documentation>
        XHTML Target Module - Attribute additions
      </xs:documentation>
    </xs:annotation>
  </xs:attributeGroup>
</xs:attributeGroup>
<xs:attributeGroup name="xhtml.input.attlist">
  <xs:annotation>
    <xs:documentation>
      Changes to XHTML Form Input Element
    </xs:documentation>
  </xs:annotation>
  <xs:attributeGroup ref="xhtml.input.attlist">
    <xs:annotation>
      <xs:documentation>
        Original Input Attributes (in Forms Module)
      </xs:documentation>
    </xs:annotation>
  </xs:attributeGroup>
  <xs:attributeGroup ref="xhtml.input.csim.attlist">
    <xs:annotation>
      <xs:documentation>
        Redefinition by Client Side Image Map Module
      </xs:documentation>
    </xs:annotation>
  </xs:attributeGroup>
  <xs:attributeGroup ref="xhtml.input.ssimap.attlist">
    <xs:annotation>
      <xs:documentation>
        Redefinition by Server Side Image Map Module
      </xs:documentation>
    </xs:annotation>
  </xs:attributeGroup>
  <xs:attributeGroup ref="xhtml.input.events.attlist">
    <xs:annotation>
      <xs:documentation>
        Redefinition by Event Attribute Module
      </xs:documentation>
    </xs:annotation>
  </xs:attributeGroup>
</xs:attributeGroup>
<xs:attributeGroup name="xhtml.label.attlist">
  <xs:attributeGroup ref="xhtml.label.attlist">
    <xs:annotation>
      <xs:documentation>
        Original Label Attributes (in Forms Module)
      </xs:documentation>
    </xs:annotation>
  </xs:attributeGroup>
  <xs:attributeGroup ref="xhtml.label.events.attlist">
    <xs:annotation>
      <xs:documentation>
        Redefinition by Event Attribute Module
      </xs:documentation>
    </xs:annotation>
  </xs:attributeGroup>
</xs:attributeGroup>
<xs:attributeGroup name="xhtml.select.attlist">
  <xs:attributeGroup ref="xhtml.select.attlist">
    <xs:annotation>
      <xs:documentation>
        Original Select Attributes (in Forms Module)
      </xs:documentation>
    </xs:annotation>
  </xs:attributeGroup>
  <xs:attributeGroup ref="xhtml.select.events.attlist">
    <xs:annotation>
      <xs:documentation>
        Redefinition by Event Attribute Module
      </xs:documentation>
    </xs:annotation>
  </xs:attributeGroup>
</xs:attributeGroup>
<xs:attributeGroup name="xhtml.textarea.attlist">
  <xs:attributeGroup ref="xhtml.textarea.attlist">
    <xs:annotation>
      <xs:documentation>
        Original TextArea Attributes (in Forms Module)
      </xs:documentation>
    </xs:annotation>
  </xs:attributeGroup>
  <xs:attributeGroup ref="xhtml.textarea.events.attlist">
    <xs:annotation>
      <xs:documentation>
        Redefinition by Event Attribute Module
      </xs:documentation>
    </xs:annotation>
  </xs:attributeGroup>
</xs:attributeGroup>
<xs:attributeGroup name="xhtml.button.attlist">

```

```

        <xs:attributeGroup ref="xhtml.button.attlist">
          <xs:annotation>
            <xs:documentation>
              Original Button Attributes (in Forms Module)
            </xs:documentation>
          </xs:annotation>
        </xs:attributeGroup>
        <xs:attributeGroup ref="xhtml.button.events.attlist">
          <xs:annotation>
            <xs:documentation>
              Redefinition by Event Attribute Module
            </xs:documentation>
          </xs:annotation>
        </xs:attributeGroup>
      </xs:attributeGroup>
    </xs:redefine>
    <xs:include schemaLocation="xhtml-ruby-basic-1.xsd">
      <xs:annotation>
        <xs:documentation>
          Ruby module

          Elements defined here:
          * ruby, rbc, rtc, rb, rt, rp

          Note that either Ruby or Basic Ruby should be used but not both
        </xs:documentation>
        <xs:documentation source="http://www.w3.org/TR/2001/REC-ruby-20010531/#simple-ruby1"/>
      </xs:annotation>
    </xs:include>
    <xs:include schemaLocation="xhtml-events-1.xsd">
      <xs:annotation>
        <xs:documentation>
          XHTML Events Modules

          Attributes defined here:
          XHTML Event Types
        </xs:documentation>
        <xs:documentation source="http://www.w3.org/TR/xhtml-modularization/abstract_modules.html#s_intrinsiceventsmodule"/>
      </xs:annotation>
    </xs:include>
  </xs:schema>

```

D.3. XHTML 1.1 Customizations

An XHTML Family Document Type (such as XHTML 1.1) must define the content model that it uses. This is done through a separate content model module that is instantiated by the XHTML Modular Framework. The content model module and the XHTML 1.1 Driver (above) work together to customize the module implementations to the document type's specific requirements. The content model module for XHTML 1.1 is defined below:

```

<?xml version="1.0" encoding="UTF-8"?>
<xs:schema
  xmlns:xs="http://www.w3.org/2001/XMLSchema"
  xmlns:xhtml="http://www.w3.org/1999/xhtml/datatypes/"
  elementFormDefault="qualified" >
  <xs:import
    namespace="http://www.w3.org/1999/xhtml/datatypes/"
    schemaLocation="xhtml-datatypes-1.xsd"/>
  <xs:annotation>
    <xs:documentation>
      This is the XML Schema module of common content models for XHTML1.1

      $Id: xhtml1.1-model-1.xsd,v 1.7 2007/02/22 13:02:52 ahby Exp $
    </xs:documentation>
    <xs:documentation source="xhtml-copyright-1.xsd"/>
  </xs:annotation>
  <xs:annotation>
    <xs:documentation>
      XHTML Document Model
      This module describes the groupings of elements/attributes
      that make up common content models for XHTML elements.
    </xs:documentation>
  </xs:annotation>

```

XHTML has following basic content models:

- xhtml.Inline.mix; character-level elements
- xhtml.Block.mix; block-like elements, e.g., paragraphs and lists
- xhtml.Flow.mix; any block or inline elements
- xhtml.HeadOpts.mix; Head Elements
- xhtml.InlinePre.mix; Special class for pre content model
- xhtml.InlineNoAnchor.mix; Content model for Anchor

Any groups declared in this module may be used to create element content models, but the above are considered 'global' (insofar as that term applies here). XHTML has the following Attribute Groups

- xhtml.Core.extra.attrib
- xhtml.I18n.extra.attrib
- xhtml.Common.extra

The above attribute Groups are considered Global

```

</xs:documentation>
</xs:annotation>
<xs:attributeGroup
  name="xhtml.I18n.extra.attrib">
  <xs:annotation>
    <xs:documentation> Extended I18n attribute </xs:documentation>
  </xs:annotation>
  <xs:attributeGroup
    ref="xhtml.dir.attrib">
    <xs:annotation>
      <xs:documentation>
        "dir" Attribute from Bi Directional Text (bdo) Module
      </xs:documentation>
    </xs:annotation>
  </xs:attributeGroup>
</xs:attributeGroup>
<xs:attributeGroup
  name="xhtml.Common.extra">
  <xs:annotation>
    <xs:documentation> Extended Common Attributes </xs:documentation>
  </xs:annotation>
  <xs:attributeGroup
    ref="xhtml.style.attrib">
    <xs:annotation>
      <xs:documentation>
        "style" attribute from Inline Style Module
      </xs:documentation>
    </xs:annotation>
  </xs:attributeGroup>
  <xs:attributeGroup ref="xhtml.Events.attrib">
    <xs:annotation>
      <xs:documentation>
        Attributes from Events Module
      </xs:documentation>
    </xs:annotation>
  </xs:attributeGroup>
</xs:attributeGroup>
<xs:attributeGroup
  name="xhtml.Core.extra.attrib">
  <xs:annotation>

```

```

        <xs:documentation> Extend Core Attributes </xs:documentation>
    </xs:annotation>
</xs:attributeGroup>
<xs:attributeGroup
    name="xhtml.Global.core.extra.attrib">
    <xs:annotation>
        <xs:documentation> Extended Global Core Attributes </xs:documentation>
    </xs:annotation>
</xs:attributeGroup>
<xs:attributeGroup
    name="xhtml.Global.I18n.extra.attrib">
    <xs:annotation>
        <xs:documentation> Extended Global I18n attributes </xs:documentation>
    </xs:annotation>
</xs:attributeGroup>
<xs:attributeGroup
    name="xhtml.Global.Common.extra">
    <xs:annotation>
        <xs:documentation> Extended Global Common Attributes </xs:documentation>
    </xs:annotation>
</xs:attributeGroup>
<xs:group
    name="xhtml.Head.extra">
    <xs:sequence/>
</xs:group>
<xs:group
    name="xhtml.HeadOpts.mix">
    <xs:choice>
        <xs:element
            name="script"
            type="xhtml.script.type"/>
        <xs:element
            name="style"
            type="xhtml.style.type"/>
        <xs:element
            name="meta"
            type="xhtml.meta.type"/>
        <xs:element
            name="link"
            type="xhtml.link.type"/>
        <xs:element
            name="object"
            type="xhtml.object.type"/>
        <xs:group
            ref="xhtml.Head.extra"/>
    </xs:choice>
</xs:group>
<xs:group
    name="xhtml.head.content">
    <xs:sequence>
        <xs:group
            ref="xhtml.HeadOpts.mix"
            minOccurs="0"
            maxOccurs="unbounded"/>
        <xs:choice>
            <xs:sequence>
                <xs:element

```

```

        name="title"
        minOccurs="1"
        maxOccurs="1"
        type="xhtml.title.type"/>
<xs:group
  ref="xhtml.HeadOpts.mix"
  minOccurs="0"
  maxOccurs="unbounded"/>
<xs:sequence
  minOccurs="0">
  <xs:element
    name="base"
    type="xhtml.base.type"/>
    <xs:group
      ref="xhtml.HeadOpts.mix"
      minOccurs="0"
      maxOccurs="unbounded"/>
  </xs:sequence>
</xs:sequence>
<xs:sequence>
  <xs:element
    name="base"
    type="xhtml.base.type"
    minOccurs="1"
    maxOccurs="1"/>
  <xs:group
    ref="xhtml.HeadOpts.mix"
    minOccurs="0"
    maxOccurs="unbounded"/>
  <xs:element
    name="title"
    minOccurs="1"
    maxOccurs="1"
    type="xhtml.title.type"/>
  <xs:group
    ref="xhtml.HeadOpts.mix"
    minOccurs="0"
    maxOccurs="unbounded"/>
</xs:sequence>
</xs:choice>
</xs:sequence>
</xs:group>
<!--
ins and del are used to denote editing changes
-->
<xs:group
  name="xhtml.Edit.class">
  <xs:choice>
    <xs:element
      name="ins"
      type="xhtml.edit.type"/>
    <xs:element
      name="del"
      type="xhtml.edit.type"/>
  </xs:choice>
</xs:group>
<!--

```

```

script and noscript are used to contain scripts
and alternative content
-->
<xs:group
  name="xhtml.Script.class">
  <xs:choice>
    <xs:element
      name="script"
      type="xhtml.script.type"/>
    <xs:element
      name="noscript"
      type="xhtml.noscript.type"/>
  </xs:choice>
</xs:group>
<xs:group
  name="xhtml.Misc.extra">
  <xs:sequence/>
</xs:group>
<!--
These elements are neither block nor inline, and can
essentially be used anywhere in the document body.
-->
<xs:group
  name="xhtml.Misc.class">
  <xs:choice>
    <xs:group
      ref="xhtml.Edit.class"/>
    <xs:group
      ref="xhtml.Script.class"/>
    <xs:group
      ref="xhtml.Misc.extra"/>
  </xs:choice>
</xs:group>
<!-- Inline Elements -->
<xs:group
  name="xhtml.InlStruct.class">
  <xs:choice>
    <xs:element
      name="br"
      type="xhtml.br.type"/>
    <xs:element
      name="span"
      type="xhtml.span.type"/>
  </xs:choice>
</xs:group>
<xs:group
  name="xhtml.InlPhras.class">
  <xs:choice>
    <xs:element
      name="em"
      type="xhtml.em.type"/>
    <xs:element
      name="strong"
      type="xhtml.strong.type"/>
    <xs:element
      name="dfn"
      type="xhtml.dfn.type"/>

```

```

    <xs:element
      name="code"
      type="xhtml.code.type"/>
    <xs:element
      name="samp"
      type="xhtml.samp.type"/>
    <xs:element
      name="kbd"
      type="xhtml.kbd.type"/>
    <xs:element
      name="var"
      type="xhtml.var.type"/>
    <xs:element
      name="cite"
      type="xhtml.cite.type"/>
    <xs:element
      name="abbr"
      type="xhtml.abbr.type"/>
    <xs:element
      name="acronym"
      type="xhtml.acronym.type"/>
    <xs:element
      name="q"
      type="xhtml.q.type"/>
  </xs:choice>
</xs:group>
<xs:group
  name="xhtml.InlPres.class">
  <xs:choice>
    <xs:element
      name="tt"
      type="xhtml.InlPres.type"/>
    <xs:element
      name="i"
      type="xhtml.InlPres.type"/>
    <xs:element
      name="b"
      type="xhtml.InlPres.type"/>
    <xs:element
      name="big"
      type="xhtml.InlPres.type"/>
    <xs:element
      name="small"
      type="xhtml.InlPres.type"/>
    <xs:element
      name="sub"
      type="xhtml.InlPres.type"/>
    <xs:element
      name="sup"
      type="xhtml.InlPres.type"/>
  </xs:choice>
</xs:group>
<xs:group
  name="xhtml.I18n.class">
  <xs:sequence>
    <xs:element
      name="bdo"

```



```

        type="xhtml.bdo.type"/>
    </xs:sequence>
</xs:group>
<xs:group
    name="xhtml.Anchor.class">
    <xs:sequence>
        <xs:element
            name="a"
            type="xhtml.a.type"/>
    </xs:sequence>
</xs:group>
<xs:group
    name="xhtml.InlSpecial.class">
    <xs:choice>
        <xs:element
            name="img"
            type="xhtml.img.type"/>
        <xs:element
            name="map"
            type="xhtml.map.type"/>
        <xs:element
            name="object"
            type="xhtml.object.type"/>
    </xs:choice>
</xs:group>
<xs:group
    name="xhtml.InlForm.class">
    <xs:choice>
        <xs:element
            name="input"
            type="xhtml.input.type"/>
        <xs:element
            name="select"
            type="xhtml.select.type"/>
        <xs:element
            name="textarea"
            type="xhtml.textarea.type"/>
        <xs:element
            name="label"
            type="xhtml.label.type"/>
        <xs:element
            name="button"
            type="xhtml.button.type"/>
    </xs:choice>
</xs:group>
<xs:group
    name="xhtml.Inline.extra">
    <xs:sequence/>
</xs:group>
<xs:group
    name="xhtml.Ruby.class">
    <xs:sequence>
        <xs:element
            name="ruby"
            type="xhtml.ruby.type"/>
    </xs:sequence>
</xs:group>

```

```

<!--
Inline.class includes all inline elements,
used as a component in mixes
-->
<xs:group
  name="xhtml.Inline.class">
  <xs:choice>
    <xs:group
      ref="xhtml.InlStruct.class"/>
    <xs:group
      ref="xhtml.InlPhras.class"/>
    <xs:group
      ref="xhtml.InlPres.class"/>
    <xs:group
      ref="xhtml.I18n.class"/>
    <xs:group
      ref="xhtml.Anchor.class"/>
    <xs:group
      ref="xhtml.InlSpecial.class"/>
    <xs:group
      ref="xhtml.InlForm.class"/>
    <xs:group
      ref="xhtml.Ruby.class"/>
    <xs:group
      ref="xhtml.Inline.extra"/>
  </xs:choice>
</xs:group>
<!--
InlNoRuby.class includes all inline elements
except ruby
-->
<xs:group
  name="xhtml.InlNoRuby.class">
  <xs:choice>
    <xs:group
      ref="xhtml.InlStruct.class"/>
    <xs:group
      ref="xhtml.InlPhras.class"/>
    <xs:group
      ref="xhtml.InlPres.class"/>
    <xs:group
      ref="xhtml.I18n.class"/>
    <xs:group
      ref="xhtml.Anchor.class"/>
    <xs:group
      ref="xhtml.InlSpecial.class"/>
    <xs:group
      ref="xhtml.InlForm.class"/>
    <xs:group
      ref="xhtml.Inline.extra"/>
  </xs:choice>
</xs:group>
<!--
InlinePre.mix
Used as a component in pre model
-->
<xs:group

```

```

    name="xhtml.InlinePre.mix">
    <xs:choice>
      <xs:group
        ref="xhtml.InlStruct.class"/>
      <xs:group
        ref="xhtml.InlPhras.class"/>
      <xs:element
        name="tt"
        type="xhtml.InlPres.type"/>
      <xs:element
        name="i"
        type="xhtml.InlPres.type"/>
      <xs:element
        name="b"
        type="xhtml.InlPres.type"/>
      <xs:group
        ref="xhtml.I18n.class"/>
      <xs:group
        ref="xhtml.Anchor.class"/>
      <xs:group
        ref="xhtml.Misc.class"/>
      <xs:element
        name="map"
        type="xhtml.map.type"/>
      <xs:group
        ref="xhtml.Inline.extra"/>
    </xs:choice>
  </xs:group>
  <!--
  InlNoAnchor.class includes all non-anchor inlines,
  used as a component in mixes
-->
  <xs:group
    name="xhtml.InlNoAnchor.class">
    <xs:choice>
      <xs:group
        ref="xhtml.InlStruct.class"/>
      <xs:group
        ref="xhtml.InlPhras.class"/>
      <xs:group
        ref="xhtml.InlPres.class"/>
      <xs:group
        ref="xhtml.I18n.class"/>
      <xs:group
        ref="xhtml.InlSpecial.class"/>
      <xs:group
        ref="xhtml.InlForm.class"/>
      <xs:group
        ref="xhtml.Ruby.class"/>
      <xs:group
        ref="xhtml.Inline.extra"/>
    </xs:choice>
  </xs:group>
  <!--
  InlNoAnchor.mix includes all non-anchor inlines
-->
  <xs:group

```

```

    name="xhtml.InlNoAnchor.mix">
    <xs:choice>
        <xs:group
            ref="xhtml.InlNoAnchor.class"/>
        <xs:group
            ref="xhtml.Misc.class"/>
    </xs:choice>
</xs:group>
<!--
Inline.mix includes all inline elements, including Misc.class
-->
<xs:group
    name="xhtml.Inline.mix">
    <xs:choice>
        <xs:group
            ref="xhtml.Inline.class"/>
        <xs:group
            ref="xhtml.Misc.class"/>
    </xs:choice>
</xs:group>
<!--
InlNoRuby.mix includes all of inline.mix elements
except ruby
-->
<xs:group
    name="xhtml.InlNoRuby.mix">
    <xs:choice>
        <xs:group
            ref="xhtml.InlNoRuby.class"/>
        <xs:group
            ref="xhtml.Misc.class"/>
    </xs:choice>
</xs:group>
<!--
In the HTML 4 DTD, heading and list elements were included
in the block group. The Heading.class and
List.class groups must now be included explicitly
on element declarations where desired.
-->
<xs:group
    name="xhtml.Heading.class">
    <xs:choice>
        <xs:element
            name="h1"
            type="xhtml.h1.type"/>
        <xs:element
            name="h2"
            type="xhtml.h2.type"/>
        <xs:element
            name="h3"
            type="xhtml.h3.type"/>
        <xs:element
            name="h4"
            type="xhtml.h4.type"/>
        <xs:element
            name="h5"
            type="xhtml.h5.type"/>

```

```

        <xs:element
            name="h6"
            type="xhtml.h6.type" />
    </xs:choice>
</xs:group>
<xs:group
    name="xhtml.List.class">
    <xs:choice>
        <xs:element
            name="ul"
            type="xhtml.ul.type" />
        <xs:element
            name="ol"
            type="xhtml.ol.type" />
        <xs:element
            name="dl"
            type="xhtml.dl.type" />
    </xs:choice>
</xs:group>
<xs:group
    name="xhtml.Table.class">
    <xs:choice>
        <xs:element
            name="table"
            type="xhtml.table.type" />
    </xs:choice>
</xs:group>
<xs:group
    name="xhtml.Form.class">
    <xs:choice>
        <xs:element
            name="form"
            type="xhtml.form.type" />
    </xs:choice>
</xs:group>
<xs:group
    name="xhtml.Fieldset.class">
    <xs:choice>
        <xs:element
            name="fieldset"
            type="xhtml.fieldset.type" />
    </xs:choice>
</xs:group>
<xs:group
    name="xhtml.BlkStruct.class">
    <xs:choice>
        <xs:element
            name="p"
            type="xhtml.p.type" />
        <xs:element
            name="div"
            type="xhtml.div.type" />
    </xs:choice>
</xs:group>
<xs:group
    name="xhtml.BlkPhras.class">
    <xs:choice>

```

```

        <xs:element
            name="pre"
            type="xhtml.pre.type"/>
        <xs:element
            name="blockquote"
            type="xhtml.blockquote.type"/>
        <xs:element
            name="address"
            type="xhtml.address.type"/>
    </xs:choice>
</xs:group>
<xs:group
    name="xhtml.BlkPres.class">
    <xs:sequence>
        <xs:element
            name="hr"
            type="xhtml.hr.type"/>
    </xs:sequence>
</xs:group>
<xs:group
    name="xhtml.BlkSpecial.class">
    <xs:choice>
        <xs:group
            ref="xhtml.Table.class"/>
        <xs:group
            ref="xhtml.Form.class"/>
        <xs:group
            ref="xhtml.Fieldset.class"/>
    </xs:choice>
</xs:group>
<xs:group
    name="xhtml.Block.extra">
    <xs:sequence/>
</xs:group>
<!--
Block.class includes all block elements,
used as an component in mixes
-->
<xs:group
    name="xhtml.Block.class">
    <xs:choice>
        <xs:group
            ref="xhtml.BlkStruct.class"/>
        <xs:group
            ref="xhtml.BlkPhras.class"/>
        <xs:group
            ref="xhtml.BlkPres.class"/>
        <xs:group
            ref="xhtml.BlkSpecial.class"/>
        <xs:group
            ref="xhtml.Block.extra"/>
    </xs:choice>
</xs:group>
<!--
Block.mix includes all block elements plus %Misc.class;
-->
<xs:group

```

```

    name="xhtml.Block.mix">
    <xs:choice>
      <xs:group
        ref="xhtml.Heading.class"/>
      <xs:group
        ref="xhtml.List.class"/>
      <xs:group
        ref="xhtml.Block.class"/>
      <xs:group
        ref="xhtml.Misc.class"/>
    </xs:choice>
  </xs:group>
<!--
All Content Elements
Flow.mix includes all text content, block and inline
Note that the "any" element included here allows us
to add data from any other namespace, a necessity
for compound document creation.
Note however that it is not possible to add
to any head level element without further
modification. To add RDF metadata to the head
of a document, modify the structure module.
-->
  <xs:group
    name="xhtml.Flow.mix">
    <xs:choice>
      <xs:group
        ref="xhtml.Heading.class"/>
      <xs:group
        ref="xhtml.List.class"/>
      <xs:group
        ref="xhtml.Block.class"/>
      <xs:group
        ref="xhtml.Inline.class"/>
      <xs:group
        ref="xhtml.Misc.class"/>
    </xs:choice>
  </xs:group>
<!--
BlkNoForm.mix includes all non-form block elements,
plus Misc.class
-->
  <xs:group
    name="xhtml.BlkNoForm.mix">
    <xs:choice>
      <xs:group
        ref="xhtml.Heading.class"/>
      <xs:group
        ref="xhtml.List.class"/>
      <xs:group
        ref="xhtml.BlkStruct.class"/>
      <xs:group
        ref="xhtml.BlkPhras.class"/>
      <xs:group
        ref="xhtml.BlkPres.class"/>
      <xs:group
        ref="xhtml.Table.class"/>

```

```
        <xs:group
            ref="xhtml.Block.extra"/>
        <xs:group
            ref="xhtml.Misc.class"/>
    </xs:choice>
</xs:group>
<xs:element
    name="html"
    type="xhtml.html.type"/>
</xs:schema>
```


E. Acknowledgements

This appendix is *informative*.

This specification was prepared by the W3C HTML Working Group. The members at the time of publication of the first edition were:

- Steven Pemberton, CWI (HTML Working Group Chair)
- Murray Altheim, Sun Microsystems
- Daniel Austin, Mozquito Technologies
- Jonny Axelsson, Opera Software
- Mark Baker, Sun Microsystems
- Tantek Çelik, Microsoft
- Doug Dominiak, Openwave Systems
- Herman Elenbaas, Philips Electronics
- Beth Epperson, Netscape/AOL
- Masayasu Ishikawa, W3C (HTML Activity Lead)
- Shin'ichi Matsui, Panasonic
- Shane McCarron, Applied Testing and Technology
- Ann Navarro, WebGeek, Inc.
- Peter Stark, Ericsson
- Michel Suignard, Microsoft
- Jeremy Wadsworth, Quark Inc.
- Malte Wedel, Mozquito Technologies
- Ted Wugofski, Openwave Systems

The members at the time of publication of the second edition were:

(insert the list here)