

Web Design with XML

Generating Web Pages with XML, CSS, XSLT and Formatting Objects

Manfred Knobloch Matthias Kopp



Contents

Preface			ix
1	Introduction		1
	1.1	Road map	-
	1.2	Working environments and tools	
	1.3	Further advice	4
2	Overview of XML, XSL and CSS		5
	2.1	An example document	5
	2.2	Organizing documents	Č
	2.3	The presentation of XML	9
	2.4	XSL as a better style language	11
	2.5	The uses of transformations	13
3	A brief introduction to XML		17
	3.1	Well-formed XML	17
	3.2	Validity	21
	3.3	The role of the parser	29
	3.4	Elements and attributes	33
	3.5	Using entities as abbreviations	34
	3.6	Notes on external applications with notations	36
	3.7	XML in an XML file	37
	3.8	Other ways of describing documents	37
	3.9	Namespaces	38
	3.10	Further reading	39
4	XMI	41	
	4.1	The syntax of CSS statements	42
	4.2	Properties	45
	4.3	Selectors	59
	4.4	Inheritance and cascade	69
	4.5	Measurements and units of measurement	70
	4.6	Generated content	71
	4.7	Style declarations in the tag	74

3	AGL	77	
	5.1 XPath	78	
	5.2 XSLT	80	
	5.3 XSL and Formatting Objects	81	
	5.4 The process of a transformation	83	
	5.5 Tools and aids	86	
6	Transformations using XSLT	91	
	6.1 Structure of an XSLT style sheet	92	
	6.2 Style sheet processing	95	
7	XPath		
	7.1 Types of document node	107	
	7.2 Location paths	111	
	7.3 Document axes	112	
	7.4 Predicates and full location paths	116	
	7.5 Abbreviated notation	118	
8	Other XSLT language elements	121	
	8.1 The modularization of style sheets	121	
	8.2 Direct control of processing	125	
9	Creating navigation structures	131	
	9.1 Creating internal links	131	
	9.2 Creating segments	136	
	9.3 Creating sequential navigation structures	143	
	9.4 Structure of a hierarchical navigation	147	
10	XSL Formatting Objects		
	10.1 Aims and status of XSL	157	
	10.2 The structure of FO documents	158	
	10.3 Creating FO documents using XSLT	166	
	10.4 Summary and outlook	176	
Appendix A: Elements of the XSLT language			
	A.1 Terms and conventions	179	
	A.2 Elements for the definition of templates and the control of their call	180	
	A.3 Elements for the structuring of style sheets	183	
	A.4 Output oriented elements	185	
	A.5 Elements for the production of variables and parameters	194	
	A.6 Elements for the control of conditional processing	196	
	A.7 Elements for sorting and numbering	198	
	A.8 Further elements	201	
	A.9 XSLT functions	205	
	A.10 XPath functions	209	
App	endix B: Complete style sheets	211	
	B.1 Structure of a hierarchical navigation, page 147	211	
	B.2 Creating FO documents, page 166	215	

Appendix	223	
C.1	Specifications	224
Index		227