Family Tree of Schema Languages for Markup Languages

Shadowed packages show viable schema languages as at late 1999. The thick lines should packages expected to be viable after 2000.
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Related languages or approaches not shown: MGML (Tim Bray), XML Notation Schemas (Jelliffe), MCF, RDF Schemas, UML, Larch, Forest Automata (Murata)

Regular expressions, BNF, etc.

SGML DTDs (ISO)

1986

Architectural Forms (ISO)

Lexical Types (ISO)

Element Definition Documents (Adobe nee Frame)

Property Sets and GROVES (ISO)

1992

XML-Data

XML DTDs (W3C)

1997

DCD

1998

SOX 1.0

DDML (nee Xschema)

Express, STEP, (ISO)

SOX 2.0

XDR: XML-Data Reduced (Microsoft)

Assertion Grammars (Dave Raggett)

1999

via DOM, Xpath

Schematron (Rick Jelliffe)

Express in XML (ISO)

XML Schema (W3C)

2000

Basic abstraction: Supertype/subtype or inheritence

Basic abstraction: Grammatical rules

Basic abstractions: Assertions and patterns