Acronyms

- SGML - Standard Generalized Markup Language
- DSSSL - Document Style Semantics Specification Lang.
- DTD - Document Type Description
- CALS - Computer-aided Acquisition and Logistic Support
- ISO - is *not* an acronym

A new way to think about text

- structure not formatting
- portable representation
- enhanced content

What you can do with it

- smart editing
- automatic generation
- databases
- typed searching
- output processing

What it is

- Markup in plain ASCII
- ISO 8879:1986
- 332 definitions; 70 basic
- history: GML
- DTD, Entity, Element

What it looks like

```
<tag>  </tag>
<tag attr=value>
&lt; &amp; &gt;
```


History

- Specific Coding (format-17)
- late 1960's: Generic Coding (header)
- 1969: GML (IBM, Goldfarb, Mosher, Lorie) for law offices
- Invented 1974 by Charles F. Goldfarb
- 1978: ANSI committee
- 1983: GCA standard
- 1985: final ISO draft
- 1987: DoD CALS

HTML

- Simple DTD - 70 elements
- historically, no invalid pages
- comment syntax

```
<-- comment -- -- another one -->
```


Docbook

`http://www.oreilly.com/davenport/`

- Software Documentation
- Very rich (400+ tags)
- Industry Consortium

Other DTDs

- QWERTZ
- sgml-tools/linuxdoc
- TEI (Text Encoding Initiative)

sgml-lecture.sgml

```
<!doctype slideshow SYSTEM "slides.dtd">
<slideshow>
 <title>Introduction to SGML</title>
 <author>Mark Eichin, SIPB</author>
 <date>IAP 1998</date>
 <slide>
 <header>A new way to think about text</header>
 <bullet>structure not content</bullet>
 </slide>
```


slides.dtd

```
<!ENTITY lt    SDATA "<">
<!ENTITY gt    SDATA ">">
<!ENTITY amp   SDATA "&">
<!element slideshow o o (title?, author?, date?, slide*)>
<!element (header|title|author|date) - - (#PCDATA)>
<!element slide - - (header, (bullet|subbullet|url|raw|example)+)>
<!element bullet - - (#PCDATA)>
<!element subbullet - - (#PCDATA)>
<!element url - - (#PCDATA)>
<!element raw - - (#PCDATA)>
<!element example - - (#PCDATA)>
```


sgmlspm

- perl interface to add code to tags

```
sgml('<SLIDE>', sub {  &inittag;
  output "%%Page: $pageno\n";
  output "($savetitle) showtitle\n";
  output "($pageno) showpageno\n"; $pageno++; });
sgml('</SLIDE>', sub {
  output "finishpage\n";
});
```

Commercial Tools

- Frame 5.5+SGML (?)
- WordPerfect 8
- OmniMark (LE)

Other Stuff

- HyTime: ISO 10744
  Hypermedia/Time-based Structuring Language
- mathematics
- MIME-SGML
- OCLC, LOC
- Chemistry, Physics, Astronomy

Pointers

`http://www.mit.edu/iap/iap-sgml.html`
`http://www.sil.org/sgml/sgml.html`
`ftp://ftp.lysator.liu.se/pub/sgml/psgml-1.0.1.tar.gz`
`http://www.jclark.com/jade/`

- comp.text.sgml

DSSSL

- R4RS Scheme
- Document Style Semantics Specification Language
- ISO/IEC 10179:1996

XML (Extensible Markup Language)

- W3C effort
- Stripped down SGML
- XML parser in java
- Web Spiders/Robots
- Microsoft CDF (Channel Definition Format)
- XSL (Extensible Stylesheet Language)

Athena tools

`add sgml`

- jade, nsgmls, stylesheets