A history of markup languages

By Tibs / Tony Ibbs

This version for the Write The Docs, Prague, 2018

Written using reStructuredText.

Converted to PDF slides using pandoc and beamer.

Source and extended notes at https://github.com/tibs/markup-history

Timeline

- ▶ 1960s TYPSET and RUNOFF, GML
- ▶ 1970s roff, runoff, nroff/troff, T_FX in SAIL
- ▶ 1980s T_FX in WEB/Pascal, LAT_FX, SGML, TEI
- ▶ 1990s HTML, setext, Docbook, WikiWikiWeb, XML
- 2000s reStructuredText, AsciiDoc, markdown

The types of markup

Presentational or Semantic

...but also lightweight, and maybe programmable

1964: **RUNOFF**

- .LINE LENGTH 60
- .LEFT MARGIN O
- .PARAGRAPH 5

Call us on our toll free number

.CENTER

1-800-555-5555

and we will respond as soon as convenient.

1969: GML / 1986: SGML / 1997: XML

DTD for a list:

```
<!-- ELEMENT MIN CONTENT

<!ELEMENT list -- (item)+

<!ELEMENT item O O (#PCDATA, (list)*) >

and such a list:

tem>First item</item>
<item>Second item</item>
<item>Last item</item>
</list>
```

1970s: roff, nroff, troff, groff

```
.TH CORRUPT 1
.SH NAME
corrupt \- modify files by randomly changing bits
.SH SYNOPSTS
.B corrupt
[\fB\-n\fR \fIBITS\fR]
[\fB\-\-bits\fR \fIBITS\fR]
.TR file ...
.SH DESCRIPTION
.B corrupt
modifies files by toggling a randomly chosen bit.
.SH OPTIONS
.TP
.BR \-n ", " \-\-bits =\fillfR
Set the number of bits to modify. Default is one bit.
```

1977/1978: T_EX / 1983: LAT_EX

```
\begin{center}
\rule{5in}{0.1mm}
\end{center}
```

\section*{Captain Competent strikes again}

The superhero is a familiar concept in comics, science fiction and many other fields. However, I am more interested in what might be called 'the competent hero'. This is a subtler form of protagonist---a person who has attained {\em competence} in their daily life.

1987: TEI

```
<lg type="sestina">
<lg type="sestet" rhyme="ababab">
<1>I saw my soul at rest upon a
   <rhyme label="a" xml:id="A">day</rhyme></l>
<1>As a bird sleeping in the nest of
   <rhyme label="b" xml:id="B">night</rhyme>,</l>
<l>Among soft leaves that give the starlight
   <rhyme label="a" xml:id="C">way</rhyme></l>
<1>To touch its wings but not its eyes with
   <rhyme label="b" xml:id="D">light</rhyme>;</l>
<1>So that it knew as one in visions
   <rhyme label="a" xml:id="E">may</rhyme>,</l>
<1>And knew not as men waking, of
   <rhyme label="b" xml:id="F">delight</rhyme>.</l>
</lg>
```

1991: HTML

1991: Docbook

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE article PUBLIC "-//OASIS//DTD Simplified DocBook</pre>
"http://www.oasis-open.org/docbook/xml/simple/1.0/sdocbook
<article>
 <title>DocBook Tutorial</title>
 <articleinfo>
  <author>
   <firstname>Adrian</firstname> <surname>Giurca</surname>
  </author>
  <date>April 5, 2005</date>
 </articleinfo>
 <section>
  <title>What is DocBook ?</title>
  <para>DocBook is an SGML dialect developed by O'Reilly
  and HaL Computer Systems in 1991.</para>
 </section>
</article>
```

1991: setext

This is the title. There can be only one.

Body text must be indented by two spaces.

A subheading

- **Bold words** and ~italic~ are supported.
- _Underlined_words_ are also supported.
- `Backquoted words` are not touched.
- > This text will be represented using a monospaced font.
- * This text will have a bullet mark before it.
- .. Two dots introduce text that can be ignored.
- .. Two dots alone mean the logical end of text.

. .

1994/1995: wikiwikiweb

Paragraphs are not indented.

- * This is a list item
- ** This is a sub-list item

Indented text is monospaced.

We have ''emphasis'', '''bold''', ''''bold italic'''', and a LinkToAnotherPage.

But we can A'''''voidMakingAWikiLink.

No HTML, tables, headers, maths, scripts. No links within a page.

2001/2002: reStructuredText

This is a heading

This is a paragraph. Body text is not indented.

- This is a list item. Words can be *emphasized*,
 strong or ``teletype`` yes, that's paired
 backquotes [1]_.
- This is a list item as well.

This is more of the second list item. It is indented appropriately.

This is a sub-heading

Sub-section body text is not indented either.

.. [1] Note the indentation inside the list item.

2002: Asciidoc

```
This is a heading
```

This is a paragraph. Body text is not indented.

```
- This is a list item. Words can be _italic_, *bold* or +mono+ - yes, that's paired plus-signs.
```

- This is a list item as well.

+

This is more of the second list item. It is "'joined on'" by the '+'.footnote:[Note the quotation marks around _joined on_.]

This is a sub-heading

Sub-section body text is not indented either.

2004: markdown

This is a heading

This is a paragraph. Body text is not indented.

- This is a list item. Words can be *emphasized*,
- **strong** or `inline` that's single backquotes.
- This is a list item as well.

This is more of the second list item. Its first line must be indented by 4 spaces or a tab.

This is a sub-heading

Sub-section body text is not indented either.

(No footnotes, but you (!) can include <tt>HTML</tt>.)

Fin

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