XML Based Standards

Eoin Fitzsimons

# SVG – Scalable Vector Graphics

## Definition

SVG is a markup language for describing two-dimensional graphics applications and images, and a set of related graphics script interfaces. [https://www.w3.org/Graphics/SVG/]

## Example

[SVG Simple](file:///C:\Users\eoin0\OneDrive\NCI\WEBAPP\SVG%20Simple.svg)

<svg version="1.2" xmlns="http://www.w3.org/2000/svg" viewBox="0 0 256 256" width="256" height="256">

<title>SVG Simple</title>

<style>

tspan { white-space:pre }

.s0 { fill: #241a56 }

.t1 { font-size: 24px;fill: #241a56;font-weight: 400;font-family: "DejaVuSans", "DejaVu Sans" }

</style>

<path id="Shape 1" class="s0" d="m128 188c-33.2 0-60-26.8-60-60 0-33.2 26.8-60 60-60 33.2 0 60 26.8 60 60 0 33.2-26.8 60-60 60z"/>

<text id="Black Circle" style="transform: matrix(1,0,0,1,127,61)" >

<tspan x="-70" y="0" class="t1">B</tspan><tspan y="0" class="t1">l</tspan><tspan y="0" class="t1">a</tspan><tspan y="0" class="t1">c</tspan><tspan y="0" class="t1">k</tspan><tspan y="0" class="t1"> </tspan><tspan y="0" class="t1">C</tspan><tspan y="0" class="t1">i</tspan><tspan y="0" class="t1">r</tspan><tspan y="0" class="t1">c</tspan><tspan y="0" class="t1">l</tspan><tspan y="0" class="t1">e

</tspan>

</text>

</svg>

I changed the black colours in the file using notepad++ to National College of Ireland Navy

# MathML – Mathematical Markup Language

## Definition

MathML is intended to facilitate the use and re-use of mathematical and scientific content on the Web, and for other applications such as computer algebra systems, print typesetting, and voice synthesis. MathML can be used to encode both the presentation of mathematical notation for high-quality visual display, and mathematical content, for applications where the semantics plays more of a key role such as scientific software or voice synthesis.

MathML is cast as an application of XML. As such, with adequate style sheet support, it will ultimately be possible for browsers to natively render mathematical expressions. For the immediate future, several vendors offer applets and plug-ins which can render MathML in place in a browser. Translators and equation editors which can generate HTML pages where the math expressions are represented directly in MathML will be available soon. [https://www.w3.org/Math/whatIsMathML.html]

## Example

x2 + 4x + 4 =0

<mrow>

<mrow>

<msup> <mi>x</mi> <mn>2</mn> </msup> <mo>+</mo>

<mrow>

<mn>4</mn>

<mo>&InvisibleTimes;</mo>

<mi>x</mi>

</mrow>

<mo>+</mo>

<mn>4</mn>

</mrow>

<mo>=</mo>

<mn>0</mn>

</mrow>

[https://www.w3.org/Math/whatIsMathML.html]

## My Example

2 + 2 = 4

<mrow>

<mrow>

<mrow>

<mn> 2 </mn> <mo> + </mo> <mn> 2 </mn>

</mrow>

<mo> = </mo> <mn> 4 </mn>

</mrow>

# Dublin Core

## Definition

The Dublin Core standard includes two levels: Simple and Qualified. Simple Dublin Core is comprised 15 elements. [http://paladini.github.io/dublin-core-basics/]

In essence it is just a collection of tags you could reasonably assume a website would use to describe common elements, but websites are using different tags to describe these elements.

## Example

### Tags

Title

Creator

Subject

Description

Publisher

Contributor

Date

Type

Format

Identifier

Source

Language

Relation

Coverage

Rights

# RSS – Really Simple Syndication

## Definition

RSS is a Web content syndication format.

Its name is an acronym for Really Simple Syndication.

RSS is a dialect of XML. All RSS files must conform to the XML 1.0 specification, as published on the World Wide Web Consortium (W3C) website. [https://cyber.harvard.edu/rss/rss.html#whatIsRss]

## Example

|  |  |  |
| --- | --- | --- |
| Here's a list of the required channel elements, each with a brief description, an example, and where available, a pointer to a more complete description. | | |
| Element | Description | Example |
| title | The name of the channel. It's how people refer to your service. If you have an HTML website that contains the same information as your RSS file, the title of your channel should be the same as the title of your website. | GoUpstate.com News Headlines |
| link | The URL to the HTML website corresponding to the channel. | http://www.goupstate.com/ |
| description | Phrase or sentence describing the channel. | The latest news from GoUpstate.com, a Spartanburg Herald-Journal Web site. |

# Atom

## Definition

Atom is the name of an XML-based Web content and metadata syndication format, and an application-level protocol for publishing and editing Web resources belonging to periodically updated websites.

All Atom feeds must be well-formed XML documents, and are identified with the application/atom+xml media type. [https://validator.w3.org/feed/docs/atom.html#whatIsAtom]

## Example