

CS 580 Client-Server Programming
Spring Semester, 2006
Doc 14 RSS
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References

RSS 2.01 Specification <http://blogs.law.harvard.edu/tech/rss>

The myth of RSS compatibility, Mark Pilgrim,

<http://diveintomark.org/archives/2004/02/04/incompatible-rss>

Most of the examples in this document are from this source

Atom as a Case Study, Tim Bray,

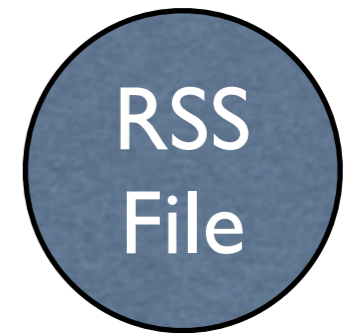
<http://www.tbray.org/ongoing/When/200x/2006/03/20/Atom-as-a-Case-Study>

RSS - Really Simple Syndication or Rich Site Summary

XML format for distributing news headlines and Web content

http://www.jisc.ac.uk/index.cfm?name=fairsynthesis_glossary

Used to aggregate news, blogs, changes in web sites



BottomFeeder

<http://www.cincomsmalltalk.com/BottomFeeder/>

News aggregator client - RSS & Atom

VisualWorks Smalltalk

Runs on:

- FreeBSD

- Linux (x86, PowerPC, Sparc)

- Windows (98/ME/NT/2000/XP/CE 4)

- Mac OS (8/9/X)

- Unix (AIX, Irix, Compaq, HP-UX, Solaris)

RSS Example

```
<rss version="2.0">
  <channel>
    <title>Changed Pages in wiki: CS580</title>
    <link>
      http://www.eli.sdsu.edu/cgi-bin/wiki/page.ssp?wikiname=CS580
    </link>
    <description>Changed Pages in wiki: CS580</description>
    <language>en-us</language>
    <lastBuildDate>21 Mar 2006 14:11:34 -0800</lastBuildDate>
    <generator>
      RSSGenerator by whitney@cs.sdsu.edu in VW Smalltalk
    </generator>
    <item>
      <title>Questions about Chess Project</title>

      <link>
        http://www.eli.sdsu.edu/cgi-bin/wiki/page.ssp?wikiname=CS580&pagename=Questions+about+Chess+Project
      </link>
      <description>
        <b>21 Mar 2006 14:11:34</b> changed by 68.7.92.191. <br/><br/><!-- unformatted page contents -->
        Q4. Do we really have to hard-code your table, or can we code the actual equation that is used to obtain those values?

        A. Requirements indicate the required functionality, not how one achieves the functionality.
        etc.
      </description>
      <pubDate>21 Mar 2006 14:11:34 -0800</pubDate>

      <guid isPermaLink="false">
http://www.eli.sdsu.edu/cgi-bin/wiki/page.ssp?wikiname=CS580&pagename=Questions+about+Chess+Project&version=18
      </guid>
    </item>
  </channel>
</rss>
```

Required Outer Elements

```
<rss version="2.0">  
  <channel>  
  </channel>  
</rss>
```

Only one channel allowed

Required Channel Elements

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.

```

<rss version="2.0">
  <channel>
    <title>Changed Pages in wiki: CS580</title>
    <link>
      http://www.eli.sdsu.edu/cgi-bin/wiki/page.ssp?wikiname=CS580
    </link>
    <description>Changed Pages in wiki: CS580</description>
  </channel>
</rss>

```

Optional Channel Elements

language
copyright
managingEditor
webMaster
pubDate
lastBuildDate
generator
docs
cloud
ttl
image
rating
textInput
skipHours
skipDays

What about item?

Netscape RSS 0.90 vs Netscape RSS 0.91

```
<rdf:RDF
xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#"
xmlns="http://my.netscape.com/rdf/simple/0.9/">
<channel>
  <title>Mozilla Dot Org</title>
  <link>http://www.mozilla.org</link>
  <description>foo</description>
</channel>
<item>
  <title>New Status Updates</title>
  <link>http://www.mozilla.org/status/</link>
</item>
</rdf:RDF>
```

Dropped RDF

Pure XML

Added DTD

Added more elements

```
<!DOCTYPE rss SYSTEM
"http://my.netscape.com/publish/formats/rss-0.91.dtd">
<rss version="0.91">
<channel>
  <title>Example Channel</title>
  <link>http://example.com/</link>
  <description>an example feed</description>
<language>en</language>
<rating>bar</rating>
<skipHours><hour>0</hour></skipHours>
<item>
<title>1 &lt; 2</title>
<link>http://example.com/1_less_than_2.html</link>
<description>1 &lt; 2, 3 &lt; 4.
In HTML, &lt;b> starts a bold phrase
and you start a link with &lt;a href=
</description>
</item>
</channel>
</rss>
```

Netscape RSS 0.91 vs Userland RSS 0.91

Netscape 0.91	UserLand RSS 0.91
June 1999	June 2000
<hour> range 0-23	<hour> range 1-24
textInput	textInput
DTD with 96 entities 	No DTD, no entities

<!DOCTYPE rss SYSTEM "<http://my.netscape.com/publish/formats/rss-0.91.dtd>">

<rss version="0.91">

<channel>

etc.

<rss version="0.91">

<channel>

etc.

RSS-DEV Working Group RSS 1.0

December 2000

Uses RDF syntax

```
<rdf:RDF
  xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#"
  xmlns="http://purl.org/rss/1.0/">
  <channel>
    <title>Example Dot Org</title>
    <link>http://www.example.org</link>
    <description>the Example Organization web site</description>
    <items>
      <rdf:Seq>
        <rdf:li resource="http://www.example.org/status"/>
      </rdf:Seq>
    </items>
```

etc.

Userland RSS 0.92

December 2000

Same as Userland RSS 0.91 but

`<description>` now contains HTML not text

`<description>1 < 2, 3 < 4.` 0.91

In HTML, `` starts a bold phrase
and you start a link with `<a href=`
`</description>`

`<description>1 &lt; 2, 3 &lt; 4.` 0.92

In HTML, `&lt;b&gt;` starts a bold phrase
and you start a link with `&lt;a href=`
`</description>`

Userland RSS 0.93

April 2001

Draft - not blessed for public use

Used by Disney, ABC (2003)

Adds <expirationDate>

Userland RSS 0.94

August 2002

Draft - not blessed for public use

Used by Disney, ABC (2003)

Drops `<expirationDate>`

Added MIME type to description, default is text/html

```
<description type="text/plain">1 &lt; 2, 3 &lt; 4.
```

In HTML, `` starts a bold phrase

and you start a link with `<a href=`

```
</description>
```

Userland RSS 2.0

September 2002

Drops <rating> element used in 0.91, 0.92, 0.93 & 0.94

Drops MIME type to description

description may contain html but no way to know

<description>The tag indicates bold, example hi
</description>

The tag indicates bold, example hi

The tag indicates bold, example **hi**

The tag **indicates bold, example hi**

Userland RSS 2.01

November 2002

<hours> ranges changes to 0-23

<rss version="2.0">

<channel>

<title>Example Channel</title>

<link><http://example.com/></link>

<description>an example feed</description>

<language>en</language>

<textInput>

<title>Search this site:</title>

<description>Find:</description>

<name>q</name>

<link><http://example.com/search></link>

</textInput>

<skipHours>

<hour>1</hour>

</skipHours>

<item>

Userland RSS 2.01

January 2003

Changed 2.01 spec

readded <rating>

```
<rss version="2.0">
```

```
<channel>
```

```
<title>Example Channel</title>
```

```
<link>http://example.com/</link>
```

```
<description>an example feed</description>
```

```
<language>en</language>
```

```
<rating>(PICS-1.1 "http://www.classify.org/safesurf/" I r (SS~~000 1))</rating>
```