

Report

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This project aims to use XML technologies in combination with a modern build system to build a blogging framework. Blog posts are xml files, stored inside the `posts` folder, and having names of the form `post_XX.xml`, where `XX` represents a double-digit number. Each blog post that the user desires to appear in the built website must be included in the `posts.xml` file, as a `post` element of the `posts` root, as such:

```
<post filename="posts/post_38.xml" title="Introduction"/>
```

After the post was added to the `posts.xml` file, the build system (waf: <http://code.google.com/p/waf/>) should be run:

```
python waf
```

For each blog post, `waf` will generate the pdf version, and a small xml file named `post_XX_meta.xml`, which contains meta-information about the post - such as the author, and the date when it was published. These meta files are dynamically fetched, using Ajax, when the user hovers the mouse over the title of a blog post, for generating a tooltip with this information.

When the user clicks the title of a blog post, the corresponding `post_XX.xml` file will be fetched (also using Ajax), transformed using `transform.xsl` into xhtml, and the resulting xhtml will be set as the inner html for the element with an id of `content`. A link to the pdf version of the article is automatically added to the footer of the article.

The build system will automatically detect when any of the blog posts in the `posts` folder is changed, and will re-generate the corresponding meta and pdf files.

At the moment, the blog does not work in Internet Explorer, but was tested in Firefox 11 and Chrome 18.

Introduction

What is XML well-formedness and how

What is XML validation and what is the

What is the importance of the first line of

What are the differences between elements

Namespaces in XML

XML Entities

Is the semantic web a failure?

The W3C XML Schema

What are the implications of the concept of

What is the DOM ?

Evaluating SAX

What is AJAX and what are its purposes?

Is AJAX both a success and a failure?

What is XPath ?

XIML

What is XLink ?

XUL

What is the current status of CSS?

What is the current status of XSL?

What are the relative merits of CSS and

Using XSL to generate HTML

How can an XML document be best

Styling XML with CSS

Styling XML with XSL

Namespaces in XML

Namespaces, a familiar concept to C++ and Java programmers, the problem of name clashes has the potential to be more widespread and more difficult to anticipate application domains to ensure a way of mitigating potential name conflicts.

For example, a file containing information about a module

```
1 <?xml version="1.0"?>
2 <module>
3     <ID>CMT3315</ID>
4     <tutor>Ray Adams</tutor>
5 </module>
```

And another file could contain information about a module

```
1 <?xml version="1.0"?>
2 <module>
3     <name>Graphical User Interface</name>
4     <priority>high</priority>
```

A screenshot of the blog, which is about XML, with the post about namespaces loaded.

The blog can be seen "live" at: <http://mihai-rotaru.github.com/XML-Blog>