Schematron QuickFix (update)

on XML Prague

Thursday, 09 February 2017

QuickFix Concept Summary

SQF

- Extension language of Schematron:

```
<sch:rule context="b">
    <sch:assert test=".//b" sqf:fix="resolveBold"
        >Recursive bold elements</sch:assert>
    <sqf:fix id="resolveBold">
        <sqf:description>
            <sqf:title
                >Change the bold element into text
            </sqf:title>
        </sqf:description>
        <sqf:replace match=".//b" select="text()"/>
    </sqf:fix>
</sch:rule>
```

ID

Title

Action

- Read more on www.schematron-quickfix.com
- Supported by Oxygen since version 17.0

Second Draft – News Summary

SQF

- Complete specification
- Generic QuickFixes (Attribute use-for-each)
- New content model of the sqf:fix element
- Multiple descriptions for different languages

- Plans, open issues, ideas
  – RELAX NG schema
  – unparsed-copy mode to avoid resolving entities / default attribute values
  – Localisation by extracting the human readable language into external files (open discussion).

QuickFix Content Model

- In the old Content Model, the sqf:call-fix was useless

- The new Content Model is very lax:

```
sqf:fix
- sqf:param*,
- (
-        sqf:description+, ( sqf:call-fix | sqf:actionElements )+
- ) | (
-        sqf:call-fix
- )
```

Additional Rules:

- There should not be two descriptions for the same language

- A call-fix inherits the descriptions of the called QF

    - which have a language other than those of the calling QF

    - If there is no other sqf:call-fix or action element in the same QF

Use Cases

```xml
<sqf:fix id="moveQuickFix">
    <sqf:param name="moveContext" required="yes"/>
    <sqf:param name="moveTo" required="yes"/>
    <sqf:description>
        <sqf:title>Move the element <name path="$moveContext"/>
            into the element <name path="$moveTo"/>.</sqf:title>
    </sqf:description>
    <sqf:add match="$moveTo" position="last-child" select="$moveContext"/>
    <sqf:delete match="$moveContext"/>
</sqf:fix>
```

Nico Kutscherauer

Use Cases

```
<sqf:fix id="movePerson">
    <sqf:description>
        <sqf:title>Move this element at the end of the document
        </sqf:title>
    </sqf:description>
    <sqf:call-fix ref="moveQuickFix">
        <sqf:with-param name="moveContext" select="."/>
        <sqf:with-param name="moveTo" select="/*"/>
    </sqf:call-fix>



</sqf:fix>
<sqf:fix id="moveQuickFix">
    <sqf:param name="moveContext" required="yes"/>
    <sqf:param name="moveTo" required="yes"/>
    <sqf:description>
        <sqf:title>Move the element <name path="$moveContext"/>
            into the element <name path="$moveTo"/>.</sqf:title>
    </sqf:description>
    <sqf:add match="$moveTo" position="last-child" select="$moveContext"/>
    <sqf:delete match="$moveContext"/>
</sqf:fix>
```

Use Cases

```
<sqf:fix id="movePerson">



    <sqf:call-fix ref="moveQuickFix">
        <sqf:with-param name="moveContext" select="."/>
        <sqf:with-param name="moveTo" select="/*"/>
    </sqf:call-fix>



</sqf:fix>
<sqf:fix id="moveQuickFix">
    <sqf:param name="moveContext" required="yes"/>
    <sqf:param name="moveTo" required="yes"/>
    <sqf:description>
        <sqf:title>Move the element <name path="$moveContext"/>
            into the element <name path="$moveTo"/>.</sqf:title>
    </sqf:description>
    <sqf:add match="$moveTo" position="last-child" select="$moveContext"/>
    <sqf:delete match="$moveContext"/>
</sqf:fix>
```

Nico Kutscherauer

Use Cases

```xml
<sqf:fix id="movePerson">
    <sqf:description>
        <sqf:title>Move this element at the end of the document
            and delete its parent.</sqf:title>
    </sqf:description>
    <sqf:call-fix ref="moveQuickFix">
        <sqf:with-param name="moveContext" select="."/>
        <sqf:with-param name="moveTo" select="/*"/>
    </sqf:call-fix>
    <sqf:delete match="parent::*"/>



</sqf:fix>
<sqf:fix id="moveQuickFix">
    <sqf:param name="moveContext" required="yes"/>
    <sqf:param name="moveTo" required="yes"/>
    <sqf:description>
        <sqf:title>Move the element <name path="$moveContext"/>
            into the element <name path="$moveTo"/>.</sqf:title>
    </sqf:description>
    <sqf:add match="$moveTo" position="last-child" select="$moveContext"/>
    <sqf:delete match="$moveContext"/>
</sqf:fix>
```

Use Cases

```xml
<sqf:fix id="movePerson">
    <sqf:description>
        <sqf:title>Move the element and the element
            before at the end of the document.</sqf:title>
    </sqf:description>
    <sqf:call-fix ref="moveQuickFix">
        <sqf:with-param name="moveContext" select="."/>
        <sqf:with-param name="moveTo" select="/*"/>
    </sqf:call-fix>
    <sqf:call-fix ref="moveQuickFix">
        <sqf:with-param name="moveContext" select="preceding-sibling::*[1]"/>
        <sqf:with-param name="moveTo" select="/*"/>
    </sqf:call-fix>
</sqf:fix>
<sqf:fix id="moveQuickFix">
    <sqf:param name="moveContext" required="yes"/>
    <sqf:param name="moveTo" required="yes"/>
    <sqf:description>
        <sqf:title>Move the element <name path="$moveContext"/>
            into the element <name path="$moveTo"/>.</sqf:title>
    </sqf:description>
    <sqf:add match="$moveTo" position="last-child" select="$moveContext"/>
    <sqf:delete match="$moveContext"/>
</sqf:fix>
```

Escali Web Implementation

http://www.escali.schematron-quickfix.com