

CSC343 Worksheet 11 Solution

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1. a) Notes:

- XLST
 - Also means **Extensible Stylesheet Language for Transformation**
 - Allows to transform XML documents into HTML
 - Is another language
- XLST Basics

Syntax:

```
<? xml version = "1.0" encoding = "utf-8"?>
<xsl:stylesheet xmlns:xsl = "http://www.w3.org/1999/ISL/Transform">
...
</xsl:stylesheet>
```

- Templates

Example:

```
1  <? xml version = "1.0" encoding = "utf-8"?>
2  <xsl:stylesheet xmlns:xsl = "http://www.w3.org/1999/ISL/
   Transform">
3      <xsl:template match = "/">
4          <HTML>
5              <BODY>
6                  <B>This is text</b>
7              </body>
8          </html>
9      </xsl:template>
10 </xsl:stylesheet>
11
```

- Obtaining values from XML Data
 - value-of
 - * Is used to extract the value of a selected node.
 - * **Syntax:** <xsl value-of select = "*expression*" />

Example:

```

1  <? xml version = "1.0" encoding = "utf-8"?>
2  <xsl:stylesheet xmlns:xsl = "http://www.w3.org/1999/XSL/Transform">
3      <xsl:template match="/Movies/Movie">
4          <xsl:value-of select = "@title"/>
5      </xsl:template>
6  </xsl:stylesheet>
7

```

– Apply-templates

- * applies a `<xsl:template>` to the current element or to the current element's child nodes.
- `select='.'` means choose the current value

```

<?xml version="1.0" encoding="UTF-8"?>
<xsl:stylesheet version="1.0"
xmlns:xsl="http://www.w3.org/1999/XSL/Transform">

<xsl:template match="/">
  <html>
  <body>
    <h2>My CD Collection</h2>
    <xsl:apply-templates/>
  </body>
</html>
</xsl:template>

<xsl:template match="cd">
  <p>
    <xsl:apply-templates select="title"/>
    <xsl:apply-templates select="artist"/>
  </p>
</xsl:template>

<xsl:template match="title">
  Title: <span style="color:#ff0000">
    <xsl:value-of select="."/></span>
  <br />
</xsl:template>

<xsl:template match="artist">
  Artist: <span style="color:#00ff00">
    <xsl:value-of select="."/></span>
  <br />
</xsl:template>

</xsl:stylesheet>

```

My CD Collection

Title: Empire Burlesque
Artist: Bob Dylan

Title: Hide your heart
Artist: Bonnie Tyler

Title: Greatest Hits
Artist: Dolly Parton

Title: Still got the blues
Artist: Gary Moore

Title: Eros
Artist: Eros Ramazzotti

Title: One night only
Artist: Bee Gees

Title: Sylvias Mother
Artist: Dr.Hook

Title: Maggie May
Artist: Rod Stewart

Title: Romanza
Artist: Andrea Bocelli

Title: When a man loves a woman
Artist: Percy Sledge

Title: Black angel
Artist: Savage Rose

Title: 1999 Grammy Nominees
Artist: Many

Title: For the good times
Artist: Kenny Rogers

– For-loop in XLST

- * **Syntax:** `<xsl:for-each select = "expression" > ... </xsl:for-each>`
- * Is easier to maintain and read than apply templates ^[1]

```

1)  <? xml version = "1.0" encoding = "utf-8" ?>
2)  <xsl:stylesheet xmlns:xsl =
3)      "http://www.w3.org/1999/XSL/Transform">
4)      <xsl:template match = "/">
5)          <ol>
6)              <xsl:for-each select = "Stars/Star" />
7)                  <li>
8)                      <xsl:value-of select = "Name">
9)                  </li>
10)             </xsl:for-each>
11)             </ol><p/><ol>
12)                 <xsl:for-each select = "Stars/Star/Address" />
13)                     <li>
14)                         <xsl:value-of select = "City">
15)                     </li>
16)                 </xsl:for-each>
17)             </ol>
18)         </xsl:template>
19)     </xsl:stylesheet>

```

Selected Value

References:

- 1) StackOverflow, differences between for-each and templates in xsl?, link