

**Web Services**  
**Lab Assignment 1**

**Date : 18/04/2021**

**Exercise 1:**

**Create an XML files for restaurant Menu card with Multiple sub level complexity**

**Program :**

```
<?xml version="1.0" encoding="UTF-8"?>
<?xml-stylesheet type="text/xsl" href="./simple.xsl" ?>
<breakfast_menu>

<food>
<name>Belgian Waffles</name>
<price>$5.95</price>
<description>Two of our famous Belgian Waffles with plenty of real maple syrup</description>
<calories>650</calories>
</food>

<food>
<name>Strawberry Belgian Waffles</name>
<price>$7.95</price>
<description>Light Belgian waffles covered with strawberries and whipped cream</description>
<calories>900</calories>
</food>

<food>
<name>Berry-Berry Belgian Waffles</name>
<price>$8.95</price>
<description>Light Belgian waffles covered with an assortment of fresh berries and whipped
cream</description>
<calories>900</calories>
</food>

<food>
<name>French Toast</name>
<price>$4.50</price>
<description>Thick slices made from our homemade sourdough bread</description>
<calories>600</calories>
</food>

<food>
<name>Homestyle Breakfast</name>
```

```

<price>$6.95</price>
<description>Two eggs, bacon or sausage, toast, and our ever-popular hash browns</description>
<calories>950</calories>
</food>
</breakfast_menu>

```

### Xsl Program :

```

<?xml version="1.0" encoding="UTF-8"?>
<html xsl:version="1.0" xmlns:xsl="http://www.w3.org/1999/XSL/Transform">
<body style="font-family:Arial;font-size:12pt;background-color:#EEEEEE">
<xsl:for-each select="breakfast_menu/food">
<div style="background-color:teal;color:white;padding:4px">
<span style="font-weight:bold"><xsl:value-of select="name"/> - </span>
<xsl:value-of select="price"/>
</div>
<div style="margin-left:20px;margin-bottom:1em;font-size:10pt">
<p>
<xsl:value-of select="description"/>
<span style="font-style:italic">(<xsl:value-of select="calories"/> calories per serving)</span>
</p>
</div>
</xsl:for-each>
</body>
</html>

```

### Output :

<b>Belgian Waffles - \$5.95</b>
Two of our famous Belgian Waffles with plenty of real maple syrup ( <i>650 calories per serving</i> )
<b>Strawberry Belgian Waffles - \$7.95</b>
Light Belgian waffles covered with strawberries and whipped cream ( <i>900 calories per serving</i> )
<b>Berry-Berry Belgian Waffles - \$8.95</b>
Light Belgian waffles covered with an assortment of fresh berries and whipped cream ( <i>900 calories per serving</i> )
<b>French Toast - \$4.50</b>
Thick slices made from our homemade sourdough bread ( <i>600 calories per serving</i> )
<b>Homestyle Breakfast - \$6.95</b>
Two eggs, bacon or sausage, toast, and our ever-popular hash browns ( <i>950 calories per serving</i> )

## **Exercise 2.**

### **Create DTD and XML Schema for an meeting Letter**

#### **Program :**

```
<?xml version="1.0" encoding="UTF-8"?>

<!DOCTYPE note [
<!ENTITY nbsp "&#xA0;">
<!ENTITY writer "Writer: Donald Duck.">
<!ENTITY copyright "Copyright: W3Schools.">
]>

<note>
<to>Tove</to>
<from>Jani</from>
<heading>Reminder</heading>
<body>Don't forget me this weekend!</body>
<footer>&writer;&nbsp;&copyright;</footer>
</note>
```

#### **Output :**



```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE note>
- <note>
    <to>Tove</to>
    <from>Jani</from>
    <heading>Reminder</heading>
    <body>Don't forget me this weekend!</body>
    <footer>Writer: Donald Duck. Copyright: W3Schools.</footer>
</note>
```

**Exercise 3 :**

**Tabulate the CD catalog content - that shows the selected artist play list**

**Program :**

```
<?xmlstylesheet type="text/xsl" href=".//cate.xsl" ?>
<CATALOG>
  <CD>
    <TITLE>Empire Burlesque</TITLE>
    <ARTIST>Bob Dylan</ARTIST>
    <COUNTRY>USA</COUNTRY>
    <COMPANY>Columbia</COMPANY>
    <PRICE>10.90</PRICE>
    <YEAR>1985</YEAR> </CD>
  <CD>
    <TITLE>Hide your heart</TITLE>
    <ARTIST>Bonnie Tyler</ARTIST>
    <COUNTRY>UK</COUNTRY>
    <COMPANY>CBS Records</COMPANY>
    <PRICE>9.90</PRICE>
    <YEAR>1988</YEAR> </CD>
  <CD>
    <TITLE>Greatest Hits</TITLE>
    <ARTIST>Dolly Parton</ARTIST>
    <COUNTRY>USA</COUNTRY>
    <COMPANY>RCA</COMPANY>
    <PRICE>9.90</PRICE>
    <YEAR>1982</YEAR> </CD>
  <CD>
    <TITLE>Still got the blues</TITLE>
    <ARTIST>Gary Moore</ARTIST>
    <COUNTRY>UK</COUNTRY>
    <COMPANY>Virgin records</COMPANY>
    <PRICE>10.20</PRICE>
    <YEAR>1990</YEAR> </CD>
  <CD>
    <TITLE>Eros</TITLE>
    <ARTIST>Eros Ramazzotti</ARTIST>
    <COUNTRY>EU</COUNTRY>
    <COMPANY>BMG</COMPANY>
    <PRICE>9.90</PRICE>
    <YEAR>1997</YEAR> </CD>
  <CD>
    <TITLE>One night only</TITLE>
```

<ARTIST>Bee Gees</ARTIST>  
<COUNTRY>UK</COUNTRY>  
<COMPANY>Polydor</COMPANY>  
<PRICE>10.90</PRICE>  
<YEAR>1998</YEAR> </CD>

<CD>  
  <TITLE>Sylvias Mother</TITLE>  
  <ARTIST>Dr.Hook</ARTIST>  
  <COUNTRY>UK</COUNTRY>  
  <COMPANY>CBS</COMPANY>  
  <PRICE>8.10</PRICE>  
  <YEAR>1973</YEAR> </CD>

<CD>  
  <TITLE>Maggie May</TITLE>  
  <ARTIST>Rod Stewart</ARTIST>  
  <COUNTRY>UK</COUNTRY>  
  <COMPANY>Pickwick</COMPANY>  
  <PRICE>8.50</PRICE>  
  <YEAR>1990</YEAR> </CD>

<CD>  
  <TITLE>Romanza</TITLE>  
  <ARTIST>Andrea Bocelli</ARTIST>  
  <COUNTRY>EU</COUNTRY>  
  <COMPANY>Polydor</COMPANY>  
  <PRICE>10.80</PRICE>  
  <YEAR>1996</YEAR> </CD>

<CD>  
  <TITLE>When a man loves a woman</TITLE>  
  <ARTIST>Percy Sledge</ARTIST>  
  <COUNTRY>USA</COUNTRY>  
  <COMPANY>Atlantic</COMPANY>  
  <PRICE>8.70</PRICE>  
  <YEAR>1987</YEAR> </CD>

<CD>  
  <TITLE>Black angel</TITLE>  
  <ARTIST>Savage Rose</ARTIST>  
  <COUNTRY>EU</COUNTRY>  
  <COMPANY>Mega</COMPANY>  
  <PRICE>10.90</PRICE>  
  <YEAR>1995</YEAR> </CD>

<CD>  
  <TITLE>1999 Grammy Nominees</TITLE>  
  <ARTIST>Many</ARTIST>  
  <COUNTRY>USA</COUNTRY>

<COMPANY>Grammy</COMPANY>  
<PRICE>10.20</PRICE>  
<YEAR>1999</YEAR> </CD>

<CD>  
  <TITLE>For the good times</TITLE>  
  <ARTIST>Kenny Rogers</ARTIST>  
  <COUNTRY>UK</COUNTRY>  
  <COMPANY>Mucik Master</COMPANY>  
  <PRICE>8.70</PRICE>  
  <YEAR>1995</YEAR> </CD>

<CD>  
  <TITLE>Big Willie style</TITLE>  
  <ARTIST>Will Smith</ARTIST>  
  <COUNTRY>USA</COUNTRY>  
  <COMPANY>Columbia</COMPANY>  
  <PRICE>9.90</PRICE>  
  <YEAR>1997</YEAR> </CD>

<CD>  
  <TITLE>Tupelo Honey</TITLE>  
  <ARTIST>Van Morrison</ARTIST>  
  <COUNTRY>UK</COUNTRY>  
  <COMPANY>Polydor</COMPANY>  
  <PRICE>8.20</PRICE>  
  <YEAR>1971</YEAR> </CD>

<CD>  
  <TITLE>Soulsville</TITLE>  
  <ARTIST>Jorn Hoel</ARTIST>  
  <COUNTRY>Norway</COUNTRY>  
  <COMPANY>WEA</COMPANY>  
  <PRICE>7.90</PRICE>  
  <YEAR>1996</YEAR> </CD>

<CD>  
  <TITLE>The very best of</TITLE>  
  <ARTIST>Cat Stevens</ARTIST>  
  <COUNTRY>UK</COUNTRY>  
  <COMPANY>Island</COMPANY>  
  <PRICE>8.90</PRICE>  
  <YEAR>1990</YEAR> </CD>

<CD>  
  <TITLE>Stop</TITLE>  
  <ARTIST>Sam Brown</ARTIST>  
  <COUNTRY>UK</COUNTRY>  
  <COMPANY>A and M</COMPANY>  
  <PRICE>8.90</PRICE>

<YEAR>1988</YEAR> </CD>

<CD>

<TITLE>Bridge of Spies</TITLE>

<ARTIST>T'Pau</ARTIST>

<COUNTRY>UK</COUNTRY>

<COMPANY>Siren</COMPANY>

<PRICE>7.90</PRICE>

<YEAR>1987</YEAR> </CD>

<CD>

<TITLE>Private Dancer</TITLE>

<ARTIST>Tina Turner</ARTIST>

<COUNTRY>UK</COUNTRY>

<COMPANY>Capitol</COMPANY>

<PRICE>8.90</PRICE>

<YEAR>1983</YEAR> </CD>

<CD>

<TITLE>Midt om natten</TITLE>

<ARTIST>Kim Larsen</ARTIST>

<COUNTRY>EU</COUNTRY>

<COMPANY>Medley</COMPANY>

<PRICE>7.80</PRICE>

<YEAR>1983</YEAR> </CD>

<CD>

<TITLE>Pavarotti Gala Concert</TITLE>

<ARTIST>Luciano Pavarotti</ARTIST>

<COUNTRY>UK</COUNTRY>

<COMPANY>DECCA</COMPANY>

<PRICE>9.90</PRICE>

<YEAR>1991</YEAR> </CD>

<CD>

<TITLE>The dock of the bay</TITLE>

<ARTIST>Otis Redding</ARTIST>

<COUNTRY>USA</COUNTRY>

<COMPANY>Stax Records</COMPANY>

<PRICE>7.90</PRICE>

<YEAR>1968</YEAR> </CD>

<CD>

<TITLE>Picture book</TITLE>

<ARTIST>Simply Red</ARTIST>

<COUNTRY>EU</COUNTRY>

<COMPANY>Elektra</COMPANY>

<PRICE>7.20</PRICE>

<YEAR>1985</YEAR> </CD>

<CD>

```

<TITLE>Red</TITLE>
<ARTIST>The Communards</ARTIST>
<COUNTRY>UK</COUNTRY>
<COMPANY>London</COMPANY>
<PRICE>7.80</PRICE>
<YEAR>1987</YEAR> </CD>
<CD>
  <TITLE>Unchain my heart</TITLE>
  <ARTIST>Joe Cocker</ARTIST>
  <COUNTRY>USA</COUNTRY>
  <COMPANY>EMI</COMPANY>
  <PRICE>8.20</PRICE>
  <YEAR>1987</YEAR> </CD>
</CATALOG>

```

### **XSL Program :**

```

<?xml version="1.0"?>
<xsl:stylesheet version="1.0"
  xmlns:xsl="http://www.w3.org/1999/XSL/Transform">
<xsl:template match="/">
  <html>
    <body>
      <h2>My CD Collection</h2>
      <table border="1">
        <tr bgcolor="#9acd32">
          <th>Title</th>
          <th>Artist</th>
        </tr>
        <xsl:for-each select="CATALOG/CD">
          <xsl:if test="PRICE>10">
            <tr>
              <td><xsl:value-of select="TITLE"/></td>
              <td><xsl:value-of select="ARTIST"/></td>
                <td><xsl:value-of select="COUNTRY"/></td>
                <td><xsl:value-of select="PRICE"/></td>
                <td><xsl:value-of select="YEAR"/></td>
            </tr>
          </xsl:if>
        </xsl:for-each>
      </table>
    </body>
  </html>
</xsl:template>

```

</xsl:stylesheet>

**Output :**

## My CD Collection

Title	Artist				
Empire Burlesque	Bob Dylan	USA	10.90	1985	
Still got the blues	Gary Moore	UK	10.20	1990	
One night only	Bee Gees	UK	10.90	1998	
Romanza	Andrea Bocelli	EU	10.80	1996	
Black angel	Savage Rose	EU	10.90	1995	
1999 Grammy Nominees	Many	USA	10.20	1999	