LAB Assignment 6

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CS 6C1

Q. Write an XML file which will display the Book information which includes the following: 1) Title of the book 2) Author Name 3) ISBN number 4) Publisher name 5) Edition 6) Price Write a Document Type Definition (DTD) to validate the above XML file. Display the XML file as follows. The contents should be displayed in a table. The header of the table should be in colour GREY. And the Author names column should be displayed in one colour and should be capitalised and in bold. Use your own colours for remaining columns. Use XML schemas XSL and CSS for the above purpose.

XML file with Book information:

```
<!DOCTYPE bookstore [
    <!ELEMENT bookstore (book*)>
    <!ELEMENT book (title, author, isbn, publisher, edition, price)>
    <!ELEMENT title (#PCDATA)>
    <!ELEMENT author (#PCDATA)>
    <!ELEMENT isbn (#PCDATA)>
    <!ELEMENT publisher (#PCDATA)>
    <!ELEMENT edition (#PCDATA)>
    <!ELEMENT price (#PCDATA)>
]>
<bookstore>
    <book>
        <title>A Game of Thrones</title>
        <author>GEORGE R.R. MARTIN</author>
        <isbn>978-0553103540</isbn>
        <publisher>Bantam</publisher>
        <edition>1st</edition>
        <price>$8.99</price>
    </book>
    <book>
        <title>The Catcher in the Rye</title>
        <author>J.D. SALINGER</author>
        <isbn>978-0316769488</isbn>
        <publisher>Little, Brown and Company</publisher>
        <edition>Reprint</edition>
```

```xml
      <price>$7.99</price>
    </book>
</bookstore>
```

XSLT file to transform the XML into an HTML table:

```xml
<?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>
    <head>
      <title>Book Information</title>
      <link rel="stylesheet" type="text/css" href="styles.css"/>
    </head>
    <body>
      <h2>Book Information</h2>
      <table>
        <tr bgcolor="grey">
          <th>Title</th>
          <th>Author</th>
          <th>ISBN</th>
          <th>Publisher</th>
          <th>Edition</th>
          <th>Price</th>
        </tr>
        <xsl:for-each select="bookstore/book">
          <tr>
            <td><xsl:value-of select="title"/></td>
            <td><b><xsl:value-of select="author"/></b></td>
            <td><xsl:value-of select="isbn"/></td>
            <td><xsl:value-of select="publisher"/></td>
            <td><xsl:value-of select="edition"/></td>
            <td><xsl:value-of select="price"/></td>
          </tr>
        </xsl:for-each>
      </table>
    </body>
  </html>
</xsl:template>

</xsl:stylesheet>
```

CSS file to add styling to the HTML table:

```
table {
  width: 100%;
  border-collapse: collapse;
}

th, td {
  border: 1px solid black;
  padding: 8px;
}

th {
  text-align: left;
  background-color: grey;
}

td:nth-child(2) {
  color: blue;
}

td:nth-child(2) b {
  font-weight: bold;
  text-transform: uppercase;
}
```

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