

CSPE 33: Web Technologies

Assignment - 2

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a.

```
<!ELEMENT bank (accounts, customers,
customer_accounts)>
<!ELEMENT accounts (savings_accounts,
checking_accounts)>
<!ELEMENT savings_accounts (savings_account*)>
<!ELEMENT savings_account (balance)>
<!ELEMENT balance (#CDATA)>
<!ATTLIST savings_account id ID #REQUIRED>
<!ATTLIST savings_account interest CDATA #REQUIRED>
<!ELEMENT checking_accounts (checking_account*)>
<!ELEMENT checking_account (balance)>
<!ATTLIST checking_account id ID #REQUIRED>
<!ELEMENT customers (customer*)>
<!ELEMENT customer (name, address)>
<!ATTLIST customer id ID #REQUIRED>
<!ELEMENT name (#CDATA)>
<!ELEMENT address (#CDATA)>
<!ELEMENT customer_accounts (customer_account*)>
<!ELEMENT customer_account EMPTY>
<!ATTLIST customer_account c_id IDREF #REQUIRED>
<!ATTLIST customer_account ac_id IDREF #REQUIRED>
```

b.

```
<!ELEMENT Books (Book*)>
<!ELEMENT Book (Isbn, Title, Author)>
<!ELEMENT Isbn (#CDATA)>
<!ELEMENT Title (#CDATA)>
<!ELEMENT Author (#CDATA)>
```

c.

```
<?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>
    <h1>Student Details</h1>
    <table border="1">
```

```

<tr>
  <th>Name</th>
  <th>Roll Number</th>
  <th>Department</th>
  <th>CGPA</th>
</tr>
<xsl:for-each select="Students/Student">
  <tr>
    <td>
      <xsl:value-of select="name"/>
    </td>
    <td>
      <xsl:value-of
select="rollno"/>
    </td>
    <td>
      <xsl:value-of
select="department"/>
    </td>
    <td>
      <xsl:value-of select="cgpa"/>
    </td>
  </tr>
</xsl:for-each>
</table>
</body>
</html>
</xsl:template>
</xsl:stylesheet>

```

Student Details

Name	Roll Number	Department	CGPA
John	CS101	CSE	9.5
Williams	CE034	CIVIL	7.4
Rohit	EC087	ECE	8.7

d.

```
<!ELEMENT Employee (Emp*)>
<!ELEMENT Emp (name, eid, department, doj, salary)>
<!ELEMENT name (#CDATA)>
<!ELEMENT eid (#CDATA)>
<!ELEMENT department (#CDATA)>
<!ELEMENT doj (#CDATA)>
<!ELEMENT salary (#CDATA)>
```

e.

```
<?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>Books</title>
  </head>
  <body>
    <h1>Library</h1>
    <table border="1">
      <tr>
        <th>ISBN</th>
        <th>Title</th>
        <th>Author</th>
      </tr>
      <xsl:for-each select="Books/Book">
        <tr>
          <td>
            <xsl:value-of select="Isbn"/>
          </td>
          <td>
            <xsl:value-of select="Title"/>
          </td>
          <td>
            <xsl:value-of
            select="Author"/>
          </td>
        </tr>
      </xsl:for-each>
    </table>
  </body>
</html>
</xsl:template>
</xsl:stylesheet>
```

```
        </table>
    </body>
</html>
</xsl:template>
</xsl:stylesheet>
```

Library

ISBN	Title	Author
0 – 8447 – 768	XML in a Nutshell	Harold, Elliotte Rusty
978 – 81 – 317 – 6235 – 6	Service – Oriented Architecture	Thomas Erl
978 – 81 – 317 – 1869 – 8	XML and WebServices	Ron Schmelzer