

Web Technology



Name: Dikshant Jagota
Roll No: 21813007
Section: IT-2 (IT-A)
Class: 3rd year, B.Tech

Experiment 2

1. Create XML Document to store information about a student.

Main.xml

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

<class>
  <student branch="IT">
    <fname>Dikshant</fname>
    <lname>Jagota</lname>
    <roll>2181321</roll>
    <contact>456898765</contact>
    <email>dikshant@gmail.com</email>
  </student>
  <student branch="IT">
    <fname>Karanjeet</fname>
    <lname>Kaur</lname>
    <roll>119030</roll>
    <contact>8874526398</contact>
    <email>karanj021@gmail.com</email>
  </student>
  <student branch="ECE">
    <fname>Aayush</fname>
    <lname>Arora</lname>
    <roll>213090</roll>
    <contact>7412589630</contact>
    <email>aroraarush22@gmail.com</email>
  </student>
  <student branch="IT">
    <fname>Tina</fname>
    <lname>Soni</lname>
    <roll>213009</roll>
    <contact>9896733740</contact>
    <email>s_tina9011@gmail.com</email>
  </student>
  <student branch="EE">
    <fname>Vanshika</fname>
    <lname>Chhabra</lname>
    <roll>3054</roll>
    <contact>7845296310</contact>
    <email>avanshika66@gmail.com</email>
  </student>
</class>
```

Output:

```
<?xml version="1.0" encoding="UTF-8"?>
- <class>
  - <student branch="IT">
    <fname>Dikshant</fname>
    <lname>Jagota</lname>
    <roll>2181321</roll>
    <contact>456898765</contact>
    <email>dikshant@gmail.com</email>
  </student>
  - <student branch="IT">
    <fname>Karanjeet</fname>
    <lname>Kaur</lname>
    <roll>119030</roll>
    <contact>8874526398</contact>
    <email>karanj021@gmail.com</email>
  </student>
  - <student branch="ECE">
    <fname>Aayush</fname>
    <lname>Arora</lname>
    <roll>213090</roll>
    <contact>7412589630</contact>
    <email>aroraarush22@gmail.com</email>
  </student>
  - <student branch="IT">
    <fname>Tina</fname>
    <lname>Soni</lname>
    <roll>213009</roll>
    <contact>9896733740</contact>
    <email>s_tina9011@gmail.com</email>
  </student>
  - <student branch="EE">
    <fname>Vanshika</fname>
    <lname>Chabbra</lname>
    <roll>3054</roll>
    <contact>7845296310</contact>
    <email>avanshika66@gmail.com</email>
  </student>
</class>
```

2. Create a CSS style sheet and use it to display above document.

main.xml

```
<?xml version="1.0" encoding="UTF-8"?>
<?xml-stylesheet type="text/css" href="msheet1.css"?>

<class>
  <student branch="IT">
    <fname>Dikshant</fname>
    <lname>Jagota</lname>
    <roll>2181321</roll>
    <contact>456898765</contact>
    <email>dikshant@gmail.com</email>
  </student>
  <student branch="IT">
    <fname>Karanjeet</fname>
    <lname>Kaur</lname>
    <roll>119030</roll>
    <contact>8874526398</contact>
    <email>karanj021@gmail.com</email>
  </student>
  <student branch="ECE">
    <fname>Aayush</fname>
    <lname>Arora</lname>
    <roll>213090</roll>
    <contact>7412589630</contact>
    <email>aroraarush22@gmail.com</email>
  </student>
  <student branch="IT">
    <fname>Tina</fname>
    <lname>Soni</lname>
    <roll>213009</roll>
    <contact>9896733740</contact>
    <email>s_tina9011@gmail.com</email>
  </student>
  <student branch="EE">
    <fname>Vanshika</fname>
    <lname>Chhabra</lname>
    <roll>653054</roll>
    <contact>7845296310</contact>
    <email>avanshika66@gmail.com</email>
  </student>
</class>
```

msheet1.css

```
class{
  margin-top: 20px;
  color:red;
  background-color:cyan;
  width:100%;
}
student{
  color:green;
  font-size: 40px;
  background-color: whitesmoke;
}
name, roll, email, contact, branch{
  display: block;
}
roll, name{
  font-weight: bold;
}
```

Output:

Dikshant Jagota

2181321

456898765

dikshant@gmail.com

Karanjeet Kaur

119030

8874526398

karanj021@gmail.com

Aayush Arora

213090

7412589630

aroraarush22@gmail.com

Tina Soni

213009

9896733740

s_tina9011@gmail.com

Vanshika Chabbra

653054

7845296310

avanshika66@gmail.com

3. Create XSL stylesheet and use it to display above document.

main.xml

```
<?xml version="1.0" encoding="UTF-8"?>
  <?xml-stylesheet type="text/xsl" href="msheet2.xsl"?>

  <class>
    <student branch="IT">
      <fname>Dikshant</fname>
      <lname>Jagota</lname>
      <roll>2181321</roll>
      <contact>456898765</contact>
      <email>dikshant@gmail.com</email>
    </student>
    <student branch="IT">
      <fname>Karanjeet</fname>
      <lname>Kaur</lname>
      <roll>119030</roll>
      <contact>8874526398</contact>
      <email>karanj021@gmail.com</email>
    </student>
    <student branch="ECE">
      <fname>Aayush</fname>
      <lname>Arora</lname>
      <roll>213090</roll>
      <contact>7412589630</contact>
      <email>aroraarush22@gmail.com</email>
    </student>
    <student branch="IT">
      <fname>Tina</fname>
      <lname>Soni</lname>
      <roll>213009</roll>
      <contact>9896733740</contact>
      <email>s_tina9011@gmail.com</email>
    </student>
    <student branch="EE">
      <fname>Vanshika</fname>
      <lname>Chhabra</lname>
      <roll>3054</roll>
      <contact>7845296310</contact>
      <email>avanshika66@gmail.com</email>
    </student>
  </class>
```

msheet2.xsl

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

  <xsl:template match="/class">
    <html>
      <table border="1">
        <tr>
          <th>First Name</th><th>Last
Name</th><th>Roll NO.</th><th>Contact</th><th>Email-id</th>
        </tr>
        <xsl:for-each select="student">
          <tr>
            <td><xsl:value-of select="fname"/></td>
            <td><xsl:value-of select="lname"/></td>
            <td><xsl:value-of select="roll"/></td>
            <td><xsl:value-of
select="contact"/></td>
            <td><xsl:value-of select="email"/></td>
          </tr>
        </xsl:for-each>
      </table>
    </html>
  </xsl:template>
</xsl:stylesheet>
```

Output:

First Name	Last Name	Roll NO.	Contact	Email-id
Dikshant	Jagota	2181321	456898765	dikshant@gmail.com
Karanjeet	Kaur	119030	8874526398	karanj021@gmail.com
Aayush	Arora	213090	7412589630	aroraarush22@gmail.com
Tina	Soni	213009	9896733740	s_tina9011@gmail.com
Vanshika	Chhabra	3054	7845296310	avanshika66@gmail.com

4. Create XSL stylesheet and use it to display above document.

main.html

```
<!-- Display XML element in HTML element using Data Island -->
<html>
  <head>
    <title>XML Data Island</title>
  </head>
  <body>
    <!-- Create a Data Island using xml tag and give it
some id -->
    <xml id="xmldb">
      <db>
        <member>
          <name>Dikshant Jagota</name>
          <sex>male</sex>
        </member>

        <member>
          <name>Aayush Gupta</name>
          <sex>male</sex>
        </member>
        <member>
          <name>Binod</name>
          <sex>male</sex>
        </member>

        <member>
          <name>Jasleen Royal</name>
          <sex>female</sex>
        </member>
        <member>
          <name>Tejaswi Prakash</name>
          <sex>female</sex>
        </member>

        <member>
          <name>Arijit Singh</name>
          <sex>male</sex>
        </member>
      </db>

    </xml>
    <!-- Extracted data here using the <SPAN> tag. datasrc
is used to specify the ID of the data island
you want to extract data from. datafld is used to
specify the XML tag you want to extract the data
from (here, name in first <SPAN> and sex in second
<SPAN>). -->

    <span datasrc="#xmldb" datafld="name"
color="blue"></span>
    <span datasrc="#xmldb" datafld="sex"
color="orange"></span>

  </body>
</html>
```


Output:

Dikshant Jagota male Aayush Gupta male Binod male Jasleen Royal female Tejaswi Prakash female Arijit Singh male