

Problem statement:

Using the above XML file let's try to navigate between CDs (tags in XML) with your knowledge gained on AJAX.

Artist: Bob Dylan
Title: Empire Burlesque
Year: 1985



Solution:

Html Code:

```
<!DOCTYPE html>
<html lang="en">

<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Ajax Assignment - CD Catalog</title>
  <!-- css file -->
  <link rel="stylesheet" href="ajaxasgn.css">
</head>

<body>
  <!-- main container div -->
  <div class="container">
    <!-- catalog div to display content from catalog file -->
    <div class="catalog" id="catalog">

    </div>
    <!-- div for buttons -->
    <div class="buttons" id="buttons">
      <!-- back button -->
      <button id="prev" onclick="back()"><i class="bi bi-arrow-left-circle-
fill"></i>Back</button>
      <!-- next button -->
      <button id="next" onclick="next()">Next<i class="bi bi-arrow-right-circle-
fill"></i></button>
    </div>
  </div>
  <!-- js file -->
  <script src="ajaxasgn.js" type="text/javascript"></script>
</body>

</html>
```

JS Code:

```
//variable for increment and decrement
var i = 0;
//variable to store value of CD tag
var cdTag;
//variable to store length of cd variable
var cdLen;
//calling the function to display and make connection with the xml file
displayContent(i);
function displayContent(i) {
    //xhr request initialization
    const textval = new XMLHttpRequest();
    //definition when event/window loads
    textval.onload = function () {
        const doc = textval.responseXML; //retrieving xml document
        cdTag = doc.getElementsByTagName("CD");
        cdLen = cdTag.length; //storing length of cd
        //calling the function to print values
        defData(i);
    };
    //ajax connection query
    textval.open("GET", "ajaxasgn.xml"); //xml file
    textval.send();
}
//function definition to display content
function defData(i) {
    let display;
    //display content in three rows of tables
    display = "<table><tr><th>Artist :</th><td>" +
cdTag[i].getElementsByTagName("ARTIST")[0].childNodes[0].nodeValue + "</td></tr>" +
"<tr><th>Title :</th><td>" +
cdTag[i].getElementsByTagName("TITLE")[0].childNodes[0].nodeValue + "</td></tr>" +
"<tr><th>Year :</th><td>" + cdTag[i].getElementsByTagName("YEAR")[0].childNodes[0].nodeValue
+ "</td></tr></table>"


    document.getElementById('catalog').innerHTML = display;
}
//function definition for back button
function back() {
    //checks if i is greater than [0] or not
    if (i > 0) {
        i--; //does decrement if found true
        displayContent(i); //returns the value to the displayContent function
    }
}
//function definition for next button
function next() {
    //checks if i is smaller than the one less than length of cd variable
    if (i < cdLen - 1) {
        i++; //does increment if true
        displayContent(i); //returns the value to the function
    }
}
}
```


CSS Code:

```
/* bootstrap icon stylesheet */
@import url("https://cdn.jsdelivr.net/npm/bootstrap-icons@1.8.2/font/bootstrap-icons.css");
/* universal selector */
*{
    margin:0;
    padding: 0;
    box-sizing: border-box;
    font-family: Verdana, Geneva, Tahoma, sans-serif;
}
/* main container div */
.container{
    display: flex;
    flex-direction: column;
    gap: 1em;
    margin: auto;
    width: 50%;
    text-align: left;
    justify-items: center;
    background-color:#cd96f2;
    align-items: center;
    padding: 1em;
    margin-top: 2em;
    font-size:1.5em;
}
/* styling of buttons div */
.buttons{
    display: flex;
    gap: 2em;
    width: 100%;
}
/* styling of buttons */
button{
    display: flex;
    gap: 2em;
    justify-content: center;
    padding: 0.5em;
    width: 30%;
    margin: auto;
    font-size: 1em;
    border-style: none;
    cursor: pointer;
}
/* styling of table heading in catalog div */
th{
    text-align: right;
}
/* hover effect for buttons */
button:hover{
    background-color:rgb(210, 210, 210);
}
```

Output:

Artist :Bob Dylan
Title :Empire Burlesque
Year :1985

Back

Next

Default display


Artist :Dolly Parton
Title :Greatest Hits
Year :1982

Back

Next

By next button

Artist :Bonnie Tyler
Title :Hide your heart
Year :1988

Back

Next

By back button

Reference XML File:

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