Working on Assignment

Parsing a Data File

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(worth 5 points)

Objectives: Use GDownloadUrl() to retrieve formatted data from the server

Parse an XML file, or a JSON file, using the DOM API

Material From: The data files attached to this assignment.

"Pragmatic Ajax" chapter 4

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Create another web application for browsing Foothill's CTIS course offerings. This time, the data will come from the server all in one file, and your program must parse the data to find the information that the user chooses.

As in the previous assignment, the user will start by selecting the department from one drop down list. Once the user has chosen a department, your page will update a second drop down list to make it contain only course numbers for courses in that department. When the user chooses a course number, your page will show the description for that course.

Requirements:

1) You must use GDownloadUrl()

2) You can choose to use either the data file in XML format, or the data file in JSON format. Both files are attached to this assignment.

3) You cannot modify either data file, but instead use one of them as is.

4) You must make sure that the currently selected items in the list and the description are in sync at all times.

5) As in the previous assignment, the body of your html page will contain only the following:

```
<body>
<div id = "browseCatalog">
<select id = "selectDepartment">
<option> </option>
</select>
<select id = "selectCourse">
<option> </option>
</select>
<p id = "courseDescription">
Choose a department and a course number to view a course description
</p>
</div>
```
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```
</body>
```

Hint:

You may find one of the following JavaScript functions useful in your solution

```
// Looks through an xml "tree" to find a node with a "tagname" and
// a particular "attribute" / "value" pair. Returns the node if found
// and returns null if no such node is found.
function findNode (tree, tagName, attribute, value)
{    var targetNode = null;
     var nodeArray = tree.getElementsByTagName(tagName);
     // find the first node in nodeArray with attribute == value
     for (i = 0; i < nodeArray.length && targetNode==null; ++i)
     {     if (nodeArray[i].getAttribute(attribute) == value)
          {     targetNode = nodeArray[i];
          }
     }
     return targetNode;
}



 // Looks through an "array" of objects to find the object with
// a particular "attribute"/"value" pair. Returns the object.
// Returns null if no such object is found.
 function findObject (array, attribute, value)
{    var targetObject = null;
     // find the object in array with attribute == value
     for (i = 0; i < array.length && targetObject==null; ++i)
     {     if (eval("array[" + i + "]."+attribute) == value)
          {     targetObject = array[i];
          }
     }
     return targetObject;
}
```

ctiscourses.json
ctiscourses.xml

Answer