

Filling a List Using CascadingDropDown

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Overview

The CascadingDropDown control in the AJAX Control Toolkit extends a DropDownList control so that changes in one DropDownList loads associated values in another DropDownList. (For instance, one list provides a list of US states, and the next list is then filled with major cities in that state.) The first challenge to solve is to actually fill a dropdown list using this control.

Steps

In order to activate the functionality of ASP.NET AJAX and the Control Toolkit, the **ScriptManager** control must be put anywhere on the page (but within the **<form>** element):

```
<asp:ScriptManager ID="asm" runat="server" />
```

Then, a DropDownList control is required:

```
<div>  
  Vendor: <asp:DropDownList ID="VendorsList" runat="server" />  
</div>
```

For this list, a CascadingDropDown extender is added. It will send an asynchronous request to a web service which will then return a list of entries to be displayed in the list. For this to work, the following CascadingDropDown attributes need to be set:

- **ServicePath:** URL of a web service delivering the list entries
- **ServiceMethod:** Web method delivering the list entries
- **TargetControlID:** ID of the dropdown list
- **Category:** Category information that is submitted to the web method when called
- **PromptText:** Text displayed when asynchronously loading list data from the server

Here is the markup for the **CascadingDropDown** element. The only difference between C# and VB is the name of the associated web service:

```
<ajaxToolkit:CascadingDropDown ID="ccd1" runat="server"  
  ServicePath="CascadingDropdown0.vb.aspx"  
  ServiceMethod="GetVendors"  
  TargetControlID="VendorsList" Category="Vendor" />
```

The JavaScript code coming from the **CascadingDropDown** extender calls a web service method with the following signature:

```
Public Function MethodNameHere(ByVal knownCategoryValues As
    String, ByVal category As String) As
    CascadingDropDownNameValue()
```

So the important aspect is that the method needs to return an array of type **CascadingDropDownNameValue** (defined by the ASP.NET AJAX Control Toolkit). In the **CascadingDropDownNameValue** constructor, first the list entry's text and then its value must be provided, just as **<option value="VALUE">NAME</option>** would do in HTML. Here is some sample data:

```
<%@ WebService Language="VB" Class="CascadingDropDown0" %>

Imports System.Web.Script.Services
Imports AjaxControlToolkit
Imports System.Web
Imports System.Web.Services
Imports System.Web.Services.Protocols
Imports System.Collections.Generic

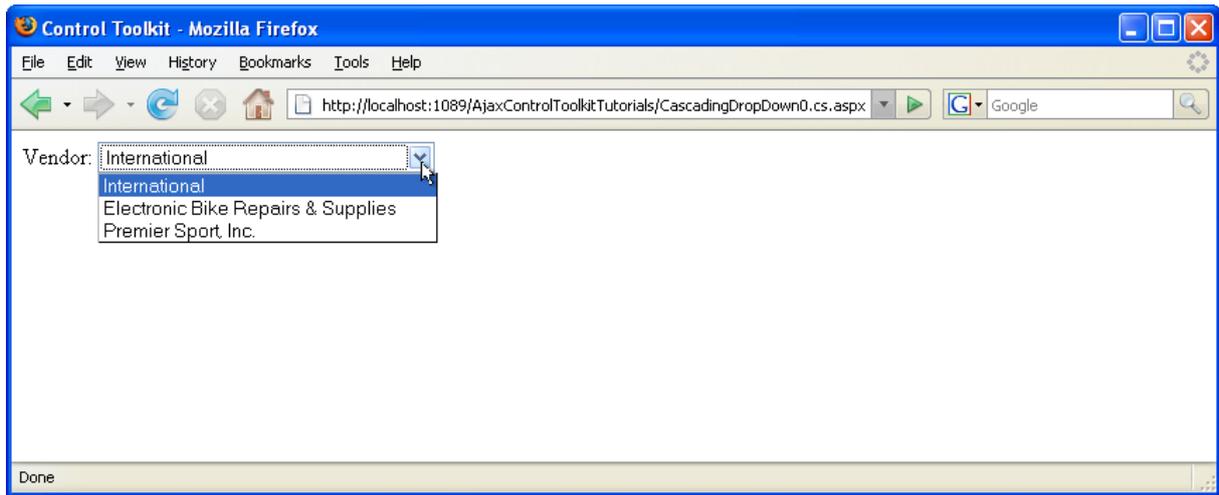
<ScriptService()> _
Public Class CascadingDropDown0
    Inherits System.Web.Services.WebService

    <WebMethod()> _
    Public Function GetVendors(ByVal knownCategoryValues As String,
        ByVal category As String) As CascadingDropDownNameValue()
        Dim l As New List(Of CascadingDropDownNameValue)

        l.Add(New CascadingDropDownNameValue("International", "1"))
        l.Add(New CascadingDropDownNameValue("Electronic Bike Repairs
        & Supplies", "2"))
        l.Add(New CascadingDropDownNameValue("Premier Sport, Inc.",
        "3"))
        Return l.ToArray()
    End Function

End Class
```

Loading the page in the browser will trigger the list to be filled with three vendors.



The list is filled automatically