Visual Studio

Drag and Drop Item

Introduction

Many web applications are required to be complex yet intuitive to the user. One way to achieve this is to create objects or areas of the web page draggable and droppable. Unfortunately, ASP.NET server controls do not have the `Drag` events and `DragEventArgs`. Fortunately, there is a way to enable drag and drop functionalities within a web page. Now keep in mind, this is not like a Windows application where you can drag files from the user's PC to the application. The drag and drop is limited to the boundaries of the web page.

Using the code

1. Create a web application within your solution.
2. Create a web page.
3. Add the provided JavaScript in the `<HEAD>` of your `<HTML>`.
4. Add two textboxes and a button in the web form.
5. Add the `DrawContainers` method to the code-behind of the web page.
6. Ensure that the `click` event for the button calls the `DrawContainers` method.

or

- Download the source code and run the sample application.

JavaScript

This is the JavaScript that enables the drag and drop to take place:

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```
<!--<span class="code-comment">------- Drag and Drop JavaScript ------------></span>
```

C# code behind - DrawContainers method

This is the code behind used to create the drag and drop objects:

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```
private void DrawContainers()
 {

     TableRowCollection trCol = this.Table1.Rows;
     TableRow tr = null;
```

```
// Should we continue?
if(this.txtContX.Text == null || this.txtContY.Text == null)
     return;


// Size of the row.
int rowSize = Int32.Parse(this.txtContX.Text);
// Number of rows.
int rowNumber = Int32.Parse(this.txtContY.Text);
// Total number of containers.
int numberOfContainers = rowSize * rowNumber;
// Boolean value for empty table cells.
bool isEmpty = false;


// Loop through all of the containers.
for(int i=0; i< numberOfContainers; i++)
 {

     // new row mod.
     int newRow =  i % rowSize;


     // Should we create a new row?
     if(tr == null || newRow == 0)
      {

          tr = new TableRow();
           trCol.Add(tr);

      }


     // Empty cell generator.
     if((i+1)%17==0)
      {

          isEmpty = true;
      }

     else
      {

          isEmpty = false;
      }


     // Set the cell collection.
      TableCellCollection tdc = tr.Cells;


     // Create a new table cell.
     TableCell td = new TableCell();
     td.ID = "cell_" + i.ToString();
```

```
        // Set the cell backcolor.
         td.BackColor = Color.Turquoise;

        // Set the cell's class.
        td.CssClass = "SpecimenLoc";


        td.Attributes.Add("SpecimenId", "");


        // Is the cell empty?
        if(!isEmpty)
         {

             td.Attributes.Add("SpecimenId", i.ToString());
              td.BackColor = Color.Beige;
              td.Text = i.ToString();
         }


        // Add javascript attributes to the cell.
        td.Attributes.Add("target", "true");
        td.Attributes.Add("onmousedown", "BeginDrag(this.id);");
        td.Attributes.Add("onmouseup", "CancelDrag();");
        td.Attributes.Add("onmouseover",
                  "setTarget(this.id);this.style.cursor='hand';");
        td.Attributes.Add("onmouseout",
                                  "this.style.cursor='default';");
        td.Width = Unit.Pixel(35);
        td.Height = Unit.Pixel(35);


        // Add the cell to the cell collection.
         tdc.Add(td);
     }
}
```

C# code behind - button click event

The `click` event of the button:

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```
private void btnDrawContainers_Click(object sender, System.EventArgs e)
{
    // Draw the containers.
    this.DrawContainers();
}
```

License

Courtesy:
http://www.codeproject.com/Articles/9168/ASP-NET-Drag-and-Drop-on-a-Webpage