Agenda

- Event flow in ASP.NET pages
- Controls
- What's in the toolBox
- Validation Control
Event flow in ASP.NET pages (.aspx)

- Application Level Events (Global.asax)
- Page_Init: page and controls are initialized
- Page_Load: all the controls and page are loaded
- Change events for controls are processed
- Click events for controls are processed
- Page_PreRender: page is about to render
- Page_Unload: page is unloaded from memory
Controls

- WebForm Controls
- HTML Controls
- Web User Controls
- Custom Controls
What’s in the Toolbox?

- WebForm Controls
  - TextBox, Label, Hyperlink, Etc
  - DropDownList, DataGrid, DataList, Etc
- HTML Controls (Client or Server)
- ADO.NET Design Controls
- System Components
- Validation Controls
Validation Controls

- RequiredFieldValidator
- CompareValidator
- RangeValidator
- RegularExpressionValidator
- CustomValidator
- ValidationSummary
Demo
Data Presentation Using ASP.NET Data Grids
Basic Steps of Using a Data Grid

- Add the grid to a page
- Specify the content of each column using a bound column or a template
- Create a data source
- Hook the data source up to the grid
- Call DataBind() to bind and render the grid

```vba
Dim strsql As String
Dim ds As DataSet
strsql = "select id,name from Employee"
ds = sql.Populate(strsql)
GV.DataSource = ds.Tables(0)
GV.DataBind()
```
Adding the Grid to a Page

- Adding the grid
- Setting the grid’s properties to control its appearance
- Using styles and stylesheets
- By default, .NET figures out what columns are present in the datasource and renders all of them within the grid. Usually, you will want to override this.
Specifying the Content of Columns

- You must set AutoGenerateColumns = “False”
- The HTML code for each data grid contains a `<Columns>` element, which is where you’ll specify what goes into each column

You can specify the contents of a column in one of two ways:

- Use `<ASP:BoundColumn>` and bind that column to a field in the data source (more on data binding later). Do this when you want to render data as simple text.
- Use `<ASP:TemplateColumn>` and supply templates. Do this when you want to put data within a control.
Formatting Datagrids at Runtime

• Hiding columns at run time by setting visible = False.
  • MyDataGrid.Columns[].Visible can be set at runtime
• You can set the style of a column at runtime using the ItemStyle.CssClass property of the column.
Automatic Paging

- Uses the .NET event handling architecture to respond when the user changes the page
- Four steps to enabling automatic paging
  1. Set AllowPaging = True
  2. When the page is first displayed, set CurrentPageIndex=0
  3. Set paging format
  4. Implement a PageIndexChanged handler.
Ajax In ASP.Net
Introduction to AJAX

• AJAX is an acronym for **Asynchronous JavaScript And XML.**

• AJAX is not a programming language, but simply a development technique for creating interactive web applications.

• The technology uses JavaScript to send and receive data between a web browser and a web server.

• The AJAX technique makes web pages more responsive by exchanging data with a server behind the scenes, instead of reloading an entire web page each time a user makes a change.

• With AJAX, web applications can be faster, more interactive, and more user friendly.

• AJAX uses an XMLHttpRequest object to send data to a web server, and XML is commonly used as the format for receiving server data, although any format including and plain text can be used.
What is AJAX (and who cares?)

- Current postback solutions can be slow and confusing to users
- AJAX allows server-side processing to occur without a postback, and therefore...
  
  a more interactive & responsive UI
Resource:
www.msdn.com
www.jamescrowley.co.uk/downloads/presentations/ddd-ajax/AJAX.ppt