

# Chapter 4

## The Additional Web Server Controls

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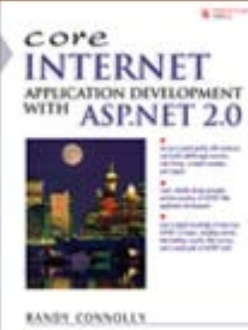
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# Overview

- This presentation briefly discusses the additional web server controls



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## The Additional Controls

- These controls are less frequently used than those covered in the previous chapter.
  - they are still quite useful to know.
- The controls covered in this chapter can be grouped into two categories:
  - those that are container controls
  - those that are not.

### 3 Additional Server Controls

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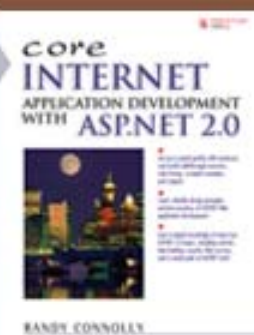
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# The Additional Controls

- The `Panel`, `MultiView` and `View`, `Wizard`, and `PlaceHolder` controls' basic function is to act as a container or parent for other controls.
  - These container controls have many powerful features that make them an important part of any ASP.NET developer's repertoire.
- The other controls covered in this chapter (`AdRotator`, `FileUpload`, and `Xml` controls) are not container controls.
  - They perform fairly specialized jobs and as such may not be used nearly as frequently as some other controls.



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# List of the Other Web Server Controls

AdRotator	Displays an advertisement banner (i.e., a randomly selected image that, when clicked, navigates to a new Web page).
FileUpload	Displays a push button that posts a Web form page back to the server. Allows a user to upload a file to the server. Consists of a text box and Browse button.
MultiView, View	The MultiView control is a container for groups of View controls.
Panel	Displays a check box for selected true or false values.

## 5 Additional Server Controls

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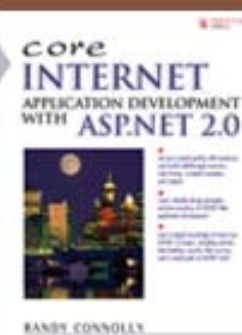
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# List of the Other Web Server Controls

PlaceHolder	A container control used for dynamically loading other controls.
Wizard	Provides a series of interconnected forms used for collecting information incrementally from the user.
Xml	Displays an XML file or the results of an XSLT (Extensible Stylesheet Language Transformation) transformation.

## 6 Additional Server Controls

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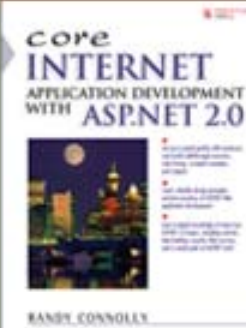


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# Panel Control

- The `Panel` control is a container control that can be used as a parent container for plain text, HTML elements, and other web server controls.
- The `Panel` control is typically used for creating group behavior, e.g.
  - creating a unique look for an area on a page
  - programmatically display and hide groups of controls.

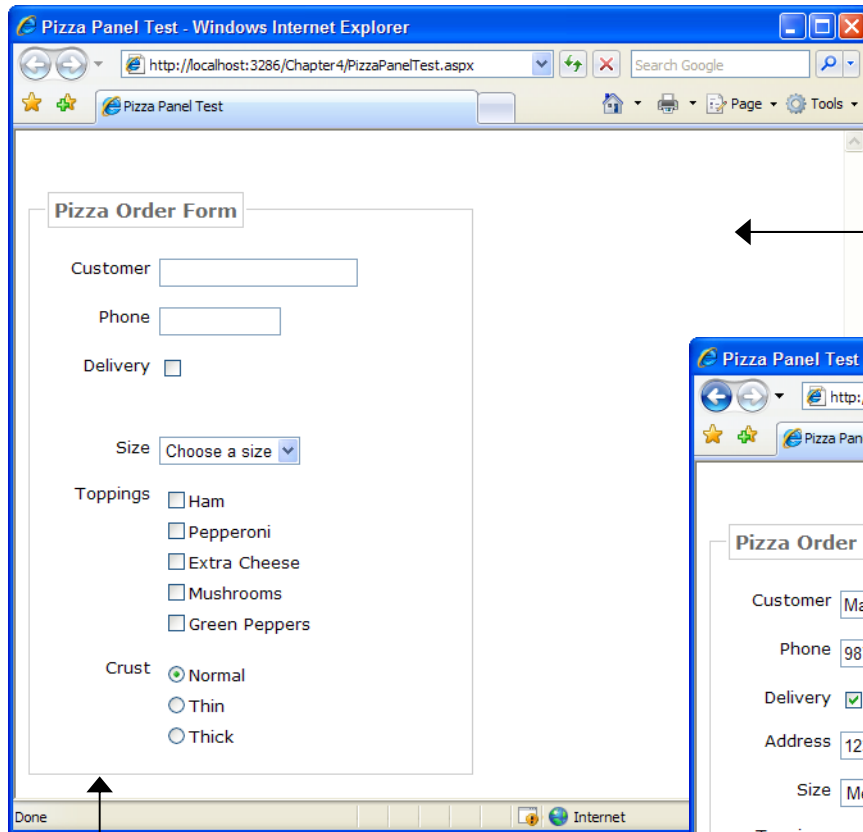
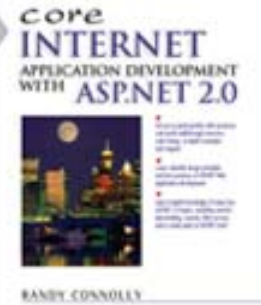


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# Panel Control

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Pizza Order Form

Customer

Phone

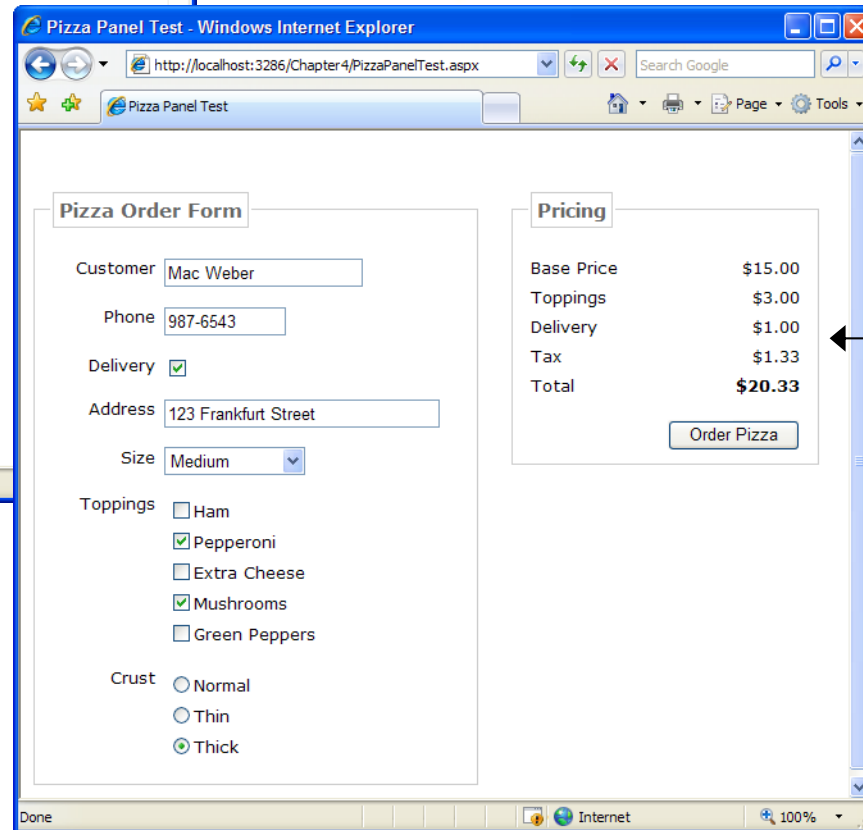
Delivery

Size Choose a size

Toppings  Ham  
 Pepperoni  
 Extra Cheese  
 Mushrooms  
 Green Peppers

Crust  Normal  
 Thin  
 Thick

Panel  
(Hidden)



Pizza Order Form

Customer Mac Weber

Phone 987-6543

Delivery

Address 123 Frankfurt Street

Size Medium

Toppings  Ham  
 Pepperoni  
 Extra Cheese  
 Mushrooms  
 Green Peppers

Crust  Normal  
 Thin  
 Thick

Pricing	
Base Price	\$15.00
Toppings	\$3.00
Delivery	\$1.00
Tax	\$1.33
<b>Total</b>	<b>\$20.33</b>

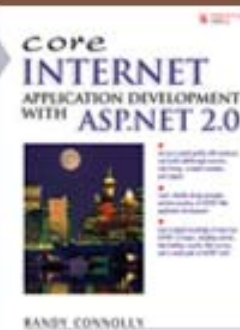
Order Pizza

Panel  
(Visible)

Panel

## MultiView + View

- Like the Panel control the MultiView control is a container control for other content and controls.
  - The MultiView control is a container for groups of View controls.
  - Each of these View controls is also a container for other controls and HTML content.
- They are an easier way to selectively display and hide groups of controls than using multiple Panel controls.
  - Often no programming is required.



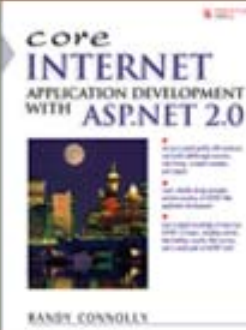
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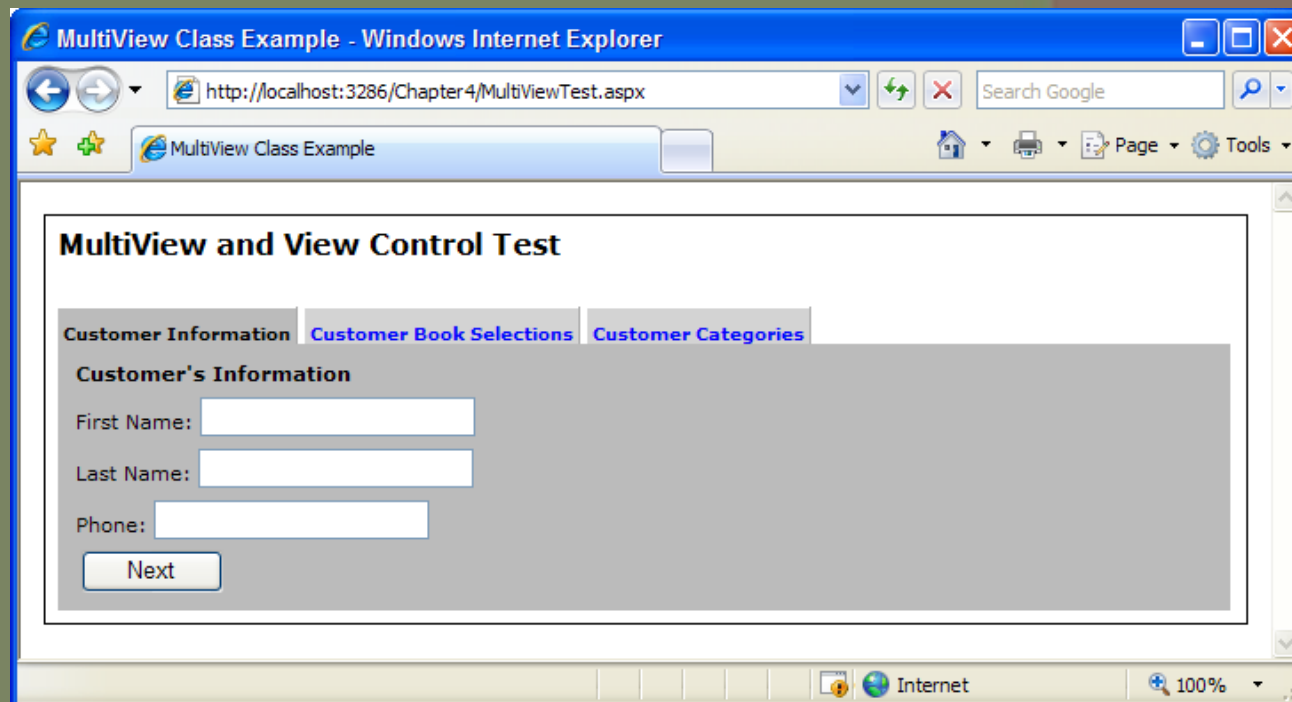
# Styling a MultiView

- One way of using the `MultiView` control is to create tabbed panels similar to those found in Windows applications, where each `View` corresponds to a separate tab.
  - all one needs to do is add `LinkButton` controls to each `View` that will act as the tabs and then use CSS to style the `LinkButton` controls to look like tabs.



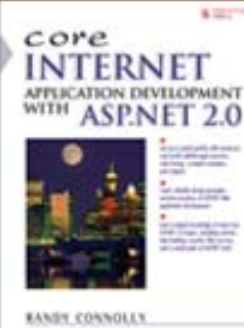
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# Web Wizards

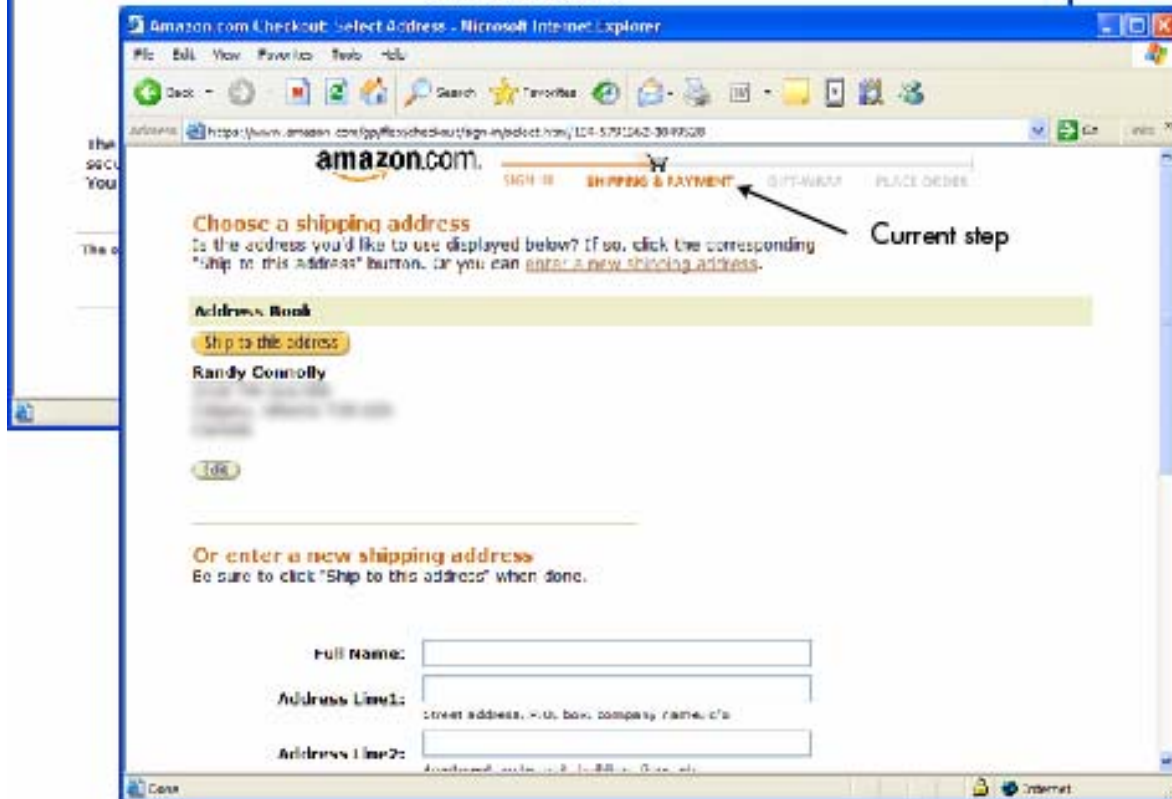
- Web applications often require some type of wizard-style interface that leads the user through a series of step-by-step forms.
- A wizard is thus used to retrieve information from the user via a series of discrete steps.
  - each step in the wizard asks the user to enter some subset of information.



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# Web Wizard



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# Web Wizards

- In regular Windows applications, wizards tend to be **modal** in that the user can not do any other processing while the wizard is active:
  - the user can only move forward, backwards, finish, or possibly jump to some other step in the wizard.
- As well, Windows-based wizards are **pipelines**,
  - i.e., a wizard is a chain of processes in which there is only one entrance and where the output of each step in the process is the input to the next step.



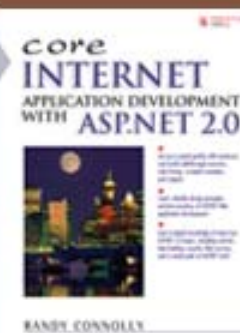
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# Web Wizards

- Implementing wizards in web applications poses several problems.
  - A Windows application can strictly control how a wizard is launched, and can easily ensure users start and exit the wizard in the appropriate way.
  - This is much harder to implement in a web environment.
    - A user could, for instance, bookmark an intermediate step in the wizard and try to return to it at some point in the future.
  - A web-based wizard must thus be able to maintain the pipeline nature of the wizard and ensure that the user only ever starts the wizard at the first step.



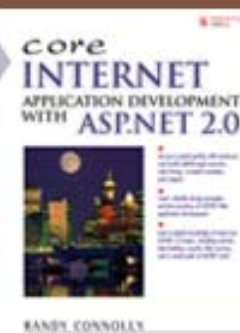
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# Web Wizards

- Maintaining state information in a multi-page web wizard can also be tricky.
  - Since the intent of a wizard is to gather information from the user in a series of discrete steps, a web wizard needs to be able to pass information gathered in previous steps onto the next step.
  - This requires repetitive coding for the retrieval and verification of the previous step's data.
  - As well, there is typically a great deal of repetitive code for the handling of navigation within the wizard.

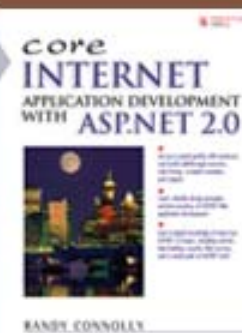


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# Wizard Control

- The `Wizard` control in ASP.NET 2.0 makes the process of creating a web wizard significantly easier.
- This control provides a simpler mechanism for building steps, adding new steps, or reordering the steps.
- The `Wizard` control eliminates the need to manage the persistence of your data across pages because the control itself maintains state while the user completes the various steps.



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# Wizard Control

```
<asp:Wizard ID="myWizard" Runat="server" HeaderText="Sample Wizard">
  <WizardSteps>

    <asp:WizardStep ID="WizardStep1" runat="server" Title="Step 1">
      <b>Step One</b><br />
      <asp:Label ID="label1" runat="server">Email</asp:Label>
      <asp:TextBox ID=" txtEmail " runat="server" /><br />
      <asp:Label ID="label2" runat="server">
        Password
      </asp:Label>
      <asp:TextBox ID="txtPassword" runat="server" />
    </asp:WizardStep>

    <asp:WizardStep ID="WizardStep2" runat="server" Title="Step 2">
      <b>Step Two</b><br />
      <asp:Label ID="label3" runat="server">
        Shipping
      </asp:Label>
      <asp:DropDownList ID="drpShipping" runat="server">
        <asp:ListItem>Air Mail</asp:ListItem>
        <asp:ListItem>Fed Ex</asp:ListItem>
      </asp:DropDownList>
    </asp:WizardStep>
  </WizardSteps>
</asp:Wizard>
```

## 17 Additional Server Controls

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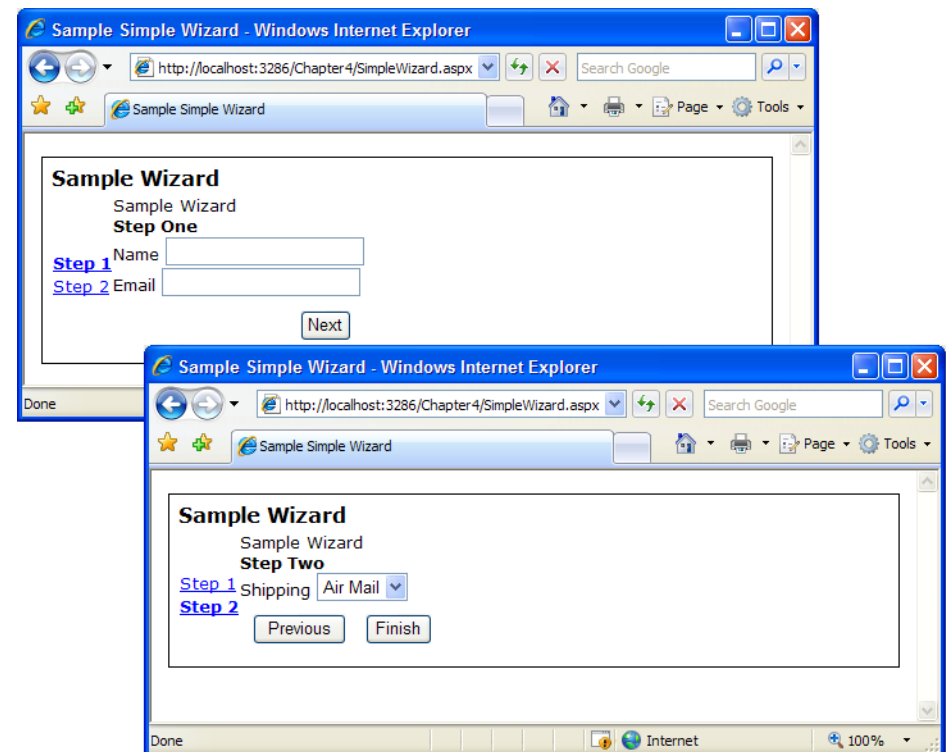
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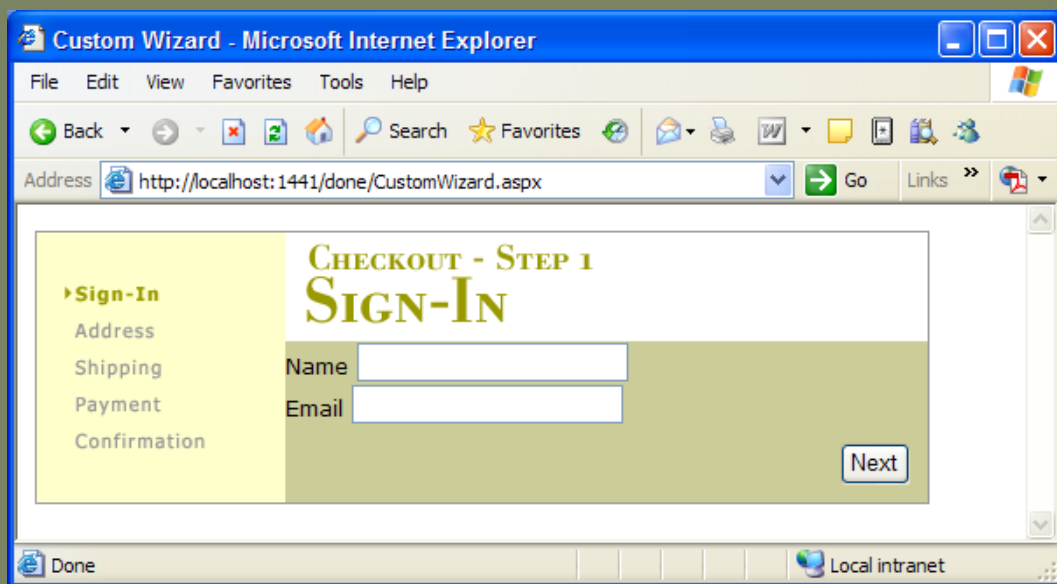


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# Wizard Styling

- You have a great deal of control over the appearance and behavior of the wizard control.



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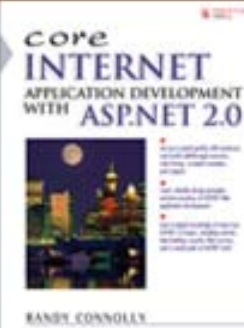
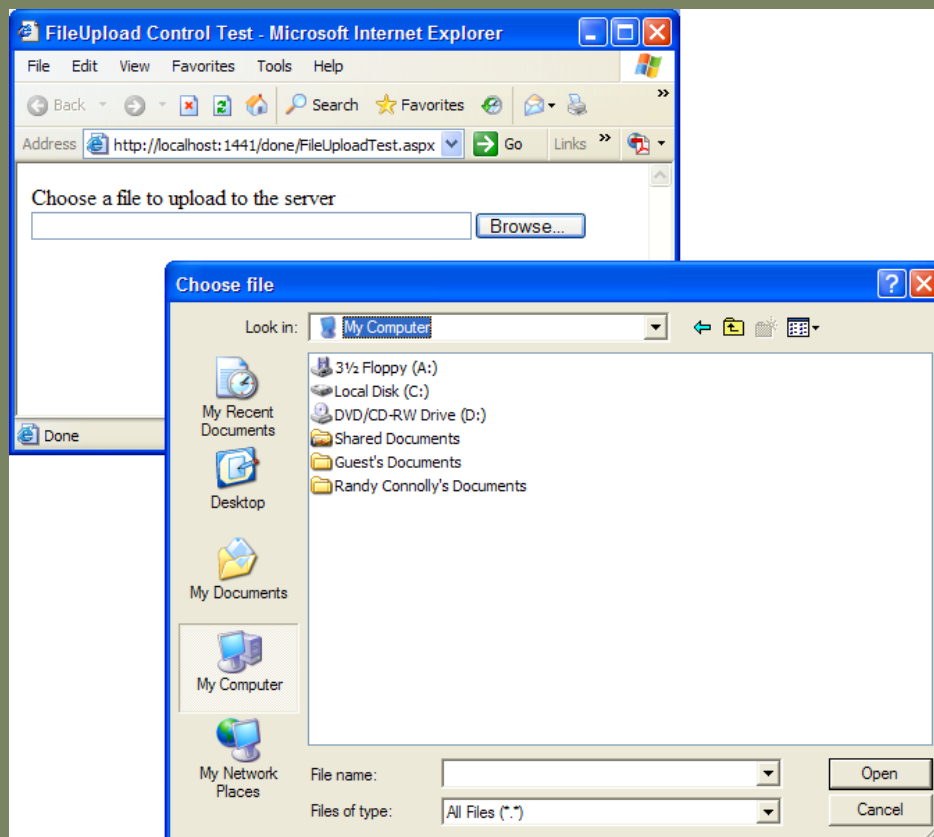
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# FileUpload Control

- The FileUpload control provides a mechanism for users to send a file from their computer to the server.
- The control is rendered in the browser as a TextBox control and a Button control.



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## Placeholder Control

- The Placeholder web server control enables you to dynamically add server controls to a page at run-time.
- The Placeholder is an empty container control with no HTML rendering on its own.
  - instead, the control renders any child elements it contains.

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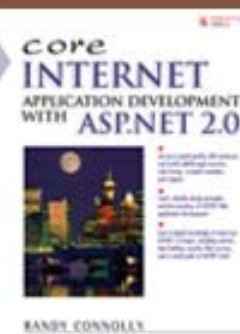
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## Placeholder Control

- There are many situations in which it might make sense to add a control dynamically at run-time rather than statically at design-time.
  - A portal application, for instance, may consist of only a few pages, each containing `Placeholder` controls that are loaded with the appropriate server and user controls at run-time according to some algorithm or some content in a database.



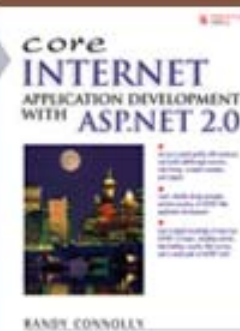
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## AdRotator Control

- Displays a randomly selected advertisement banner (a graphic image).
- The displayed advertisement can change whenever the page refreshes.
- If a user clicks the ad, he or she is redirected to the target URL specified by the control.
- The displayed advertisements can also be priority weighted; this allows certain advertisements to be displayed more often.
- The control works by reading advertisement information stored in a separate data source, which is usually an XML file.



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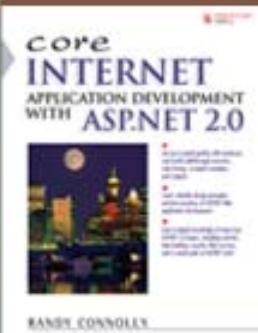
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# Xml Control

- The `Xml` server control can be used to display the unformatted contents of an XML document or the result of an XSLT transformation.

```
<asp:Xml ID="aXml" runat="server"  
  DocumentSource="~/App_Data/menu.xml"  
  TransformSource="~/App_Data/menu.xslt">
```

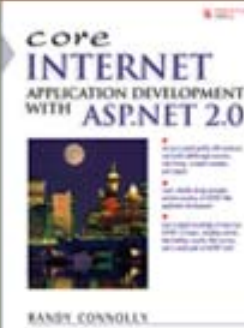


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# XSLT

- An XSLT document is itself an XML document.
  - It is an XML-based programming language for transforming XML documents.
- The .NET XSLT parser can thus be used to transform a XML document into an XML document with a different structure, a HTML file, a text file, or almost any other type of document.

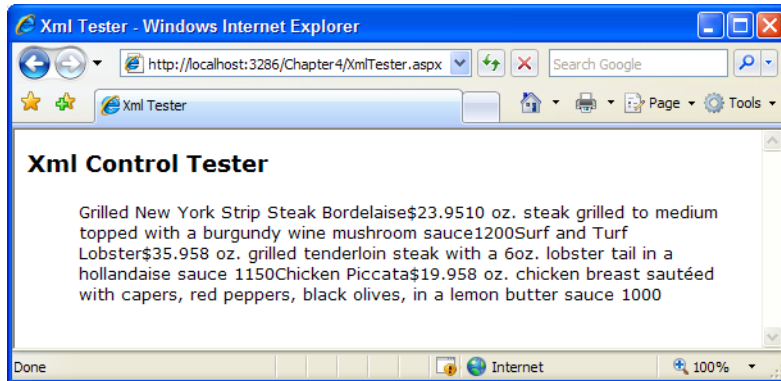


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# XML Control + XSLT

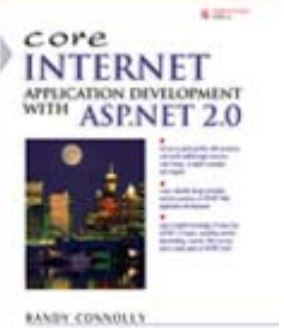
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Xml control in the browser with no XSLT

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Xml control using an XSLT file