

# Introduction to ASP.NET AJAX Toolkit

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# Next CDS Brownbag

- ◆ Scheduled for Wed, April 16, 11:30
- ◆ Topic and speaker not yet chosen

# ASP.NET Ajax Toolkit

- ◆ 34 Controls
- ◆ Updated every couple of months or so
- ◆ Source-code available
- ◆ A community project
  - hosted on CodePlex
  - Not an officially-supported Microsoft product (though Microsoft is heavily involved)

# ASP.NET Ajax Toolkit

- ◆ Most of toolkit controls are **extender** controls
- ◆ An extender is a control which extends the functionality of another control
- ◆ VS 2008 integrates extender controls into IDE designer

# Toolkit Controls (v 1.0.20229 & 3.5.20229)

- ◆ Accordion
- ◆ AlwaysVisibleControl
- ◆ Animation
- ◆ AutoComplete
- ◆ Calendar
- ◆ CascadingDropDown
- ◆ CollapsiblePanel
- ◆ ConfirmButton
- ◆ DragPanel
- ◆ DropDown
- ◆ DropShadow
- ◆ DynamicPopulate
- ◆ FilteredTextBox
- ◆ HoverMenu
- ◆ ListSearch
- ◆ MaskedEdit
- ◆ ModalPopup
- ◆ MutuallyExclusiveCheckBox
- ◆ NoBot
- ◆ NumericUpDown
- ◆ PagingBulletedList
- ◆ PasswordStrength
- ◆ PopupControl
- ◆ Rating
- ◆ ReorderList
- ◆ ResizableControl
- ◆ RoundedCorners
- ◆ Slider
- ◆ SlideShow
- ◆ Tabs
- ◆ TextBoxWatermark
- ◆ ToggleButton
- ◆ UpdatePanelAnimation
- ◆ ValidatorCallout

# Toolkit Tip

- ◆ You can download VS 2005 and VS 2008 versions with or without source code
- ◆ To add toolkit to toolbox
  1. On toolbar, Add Tab
  2. Choose Items...
  3. Browse... to  
`SampleWebSite\bin\AjaxControlToolkit.dll`
- To get easy access to docs
  - Point share to `SampleWebSite` folder

# Toolkit: Animation (1 of 3)

- ◆ `<ajaxToolkit: AnimationExtender  
TargetControlId="ControlToExtend" >  
<Animations>  
  <triggers>  
    <animation action/ >  
  </triggers>`
- ◆ Triggers: OnLoad, OnClick, OnMouseOver, OnMouseOut, OnHoverOver, OnHoverOut
- ◆ Animation Actions: can be single animation or Parallel or Sequence

# Toolkit: Animation (2 of 3)

Lots of Animations to Choose from, including...

- ◆ FadeIn
- ◆ FadeOut
- ◆ Pulse
- ◆ Color
- ◆ Move
- ◆ Resize
- ◆ Scale
- ◆ Actions ( ~ immediate animations)
  - Enable
  - Hide
  - Opacity
  - Script

# Toolkit: Animation Example (3 of 3)

- ◆ Animation.aspx

# Toolkit: AutoComplete (1 of 2)

- ◆ `<ajaxToolkit: AutoCompleteExtender  
TargetControlId="ControlToExtend"  
ServiceMethod="WebServiceMethod"  
CompletionCount=#  
MinimumPrefixLength=#/>`
- ◆ ServiceMethod
  - Can be page method or web service (if using web service need to also specify ServicePath)

```
[System.Web.Services.WebMethod]  
public static string[] WSMethod( string  
prefixText, int count)
```

## Toolkit: AutoComplete Example (2 of 2)

- ◆ AutoComplete.aspx
- ◆ Uses PageMethod to supply list

# Toolkit: DragPanel (1 of 1)

- ◆ Add "draggability" to your panels
- ◆ `<ajax:DragPanelExtender`  
    TargetControlId="panel to drag"  
    DragHandleId="control inside of panel  
    which will serve as drag handle"
- ◆ Example: DragPanel.aspx

# Toolkit: Filtered TextBox (1 of 2)

- ◆ Allows you to filter legal characters for a TextBox
- ◆ Overlaps functionality of MaskedEdit extender
- ◆ `<ajaxToolkit: FilteredTextBoxExtender  
TargetControlId="textbox to extend"  
FilterType="filter"  
ValidChars="for custom filter"  
InvalidChars="for custom filter"`
- ◆ FilterType can be Numbers, LowercaseLetters, UppercaseLetters, Custom

# Toolkit: Filtered Example (2 of 2)

- ◆ FilteredTextBox.aspx

# Toolkit: ListSearch (1 of 1)

- ◆ Overlaps AutoComplete functionality
- ◆ Provides ability to type multiple characters to do incremental search within a ListBox or DropDownList control
- ◆ `<ajaxToolkit:ListSearchExtender  
    TargetControlID="ControlToExtend"  
    PromptText="prompt text"`
- ◆ Example: ListSearch.aspx

# Toolkit: MaskedEdit (1 of 2)

- ◆ Provides input mask and optional validator to TextBox controls

```
<ajax:MaskedEditExtender
  TargetControlID="txtSSN"
  Mask="9{3}-9{2}-9{4}"
  ErrorTooltipEnabled="true"
  MessageValidatorTip="true" />
<ajax:maskededitvalidator
  ControlToValidate="txtSSN"
  ControlExtender="meeSSN"
  Display="Dynamic"
  IsValidEmpty="false"
  EmptyValueMessage="SSN is a required field."
  EmptyValueBlurredText="*" />
```

# Toolkit: MaskedEdit Example (2 of 2)

- ◆ MaskedEdit.aspx

# Toolkit: ModalPopup (1 of 1)

- ◆ Displays content in a modal manner which prevents user from interacting with page until the popup is put away.

```
<cc1:modalpopupextender  
TargetControlID="lbFeedback"  
PopupControlID="pnlFeedback"  
BackgroundCssClass="modalBackground"  
OkControlID="cmdOk"  
CancelControlID="cmdCancel"  
DropShadow="true" />
```

- ◆ Example: [ModalPopup.aspx](#)

# Toolkit: SlideShow (1 of 4)

- ◆ Extends Image controls to create slide show of images
- ◆ Requires a web method (page method or web service) to provide image list

# Toolkit: SlideShow (2 of 4)

```
<ajaxToolkit:SlideShowExtender
  TargetControlID="Image1"
  SlideShowServiceMethod="GetSlides"
  AutoPlay="true"
  ImageTitleLabelID="imageTitle"
  ImageDescriptionLabelID="imageDescription"
  NextButtonID="nextButton"
  PlayButtonText="Play"
  StopButtonText="Stop"
  PreviousButtonID="prevButton"
  PlayButtonID="playButton"
  Loop="true" />
```

# Toolkit: SlideShow (3 of 4)

## ◆ SlideShowServiceMethod

```
[System.Web.Services.WebMethod]
[System.Web.Script.Services.ScriptMethod]
public static AjaxControlToolkit.Slide[] GetSlides()
{
    return new AjaxControlToolkit.Slide[] {
    }
```

## Toolkit: SlideShow Examples (4 of 4)

- ◆ SlideShow.aspx
- ◆ SlideShow2.aspx

## Toolkit: UpdatePanel Animation (1 of 3)

- ◆ Let's you use the Animation framework of the Toolkit to provide a "cooler" set of animations than are supplied by the UpdateProgress control

## Toolkit: UpdatePanel Animation (2 of 3)

- ◆ `<ajaxToolkit:UpdatePanelAnimationExtender TargetControlId="UpdatePanelToExtend" >`  
`<Animations >`  
`< triggers >`  
`< animation action / >`  
`< / triggers >`
- ◆ Triggers: OnUpdating and OnUpdated
- ◆ Animation Actions: same as for AnimationExtender

# Toolkit: UpdatePanel Animation Example (3 of 3)

- ◆ UpdatePanelAnimation.aspx

# Thank You!

- ◆ Paul Litwin

- [plitwin@fhcrc.org](mailto:plitwin@fhcrc.org)
- <http://cds.fhcrc.org>

- ◆ I will post the lecture demos after workshop at

- <http://cds.fhcrc.org/downloads.aspx>