HTML Slidy: Slide Shows in HTML and XHTML

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Hit the space bar or swipe left for next slide

Slide Shows in HTML and XHTML

- You can now create accessible slide shows with ease
- Works across browsers and is operated like PowerPoint
  - *Advance to next slide with mouse click, space bar or swipe left*
  - *Move forward/backward between slides with Cursor Left, Cursor Right,* ***Pg Up*** *and* ***Pg Dn*** *keys, or swipe left or right*
  - ***Home*** *key for first slide,* ***End*** *key for last slide*
  - *The "**C**" key for an automatically generated table of contents, or click on "contents" on the toolbar or swipe up or down*
  - *Function* ***F11*** *to go full screen and back*
  - *The "**F**" key toggles the display of the footer*
  - *The "**A**" key toggles display of current vs all slides*
    - Try it now to see how to include notes for handouts (this is explained in the notes following this slide)
  - *Font sizes automatically adapt to browser window size*
    - use **S** and **B** keys for manual control (or < and >, or the **-** and **+** keys on the number pad
    - Use CSS to set a relative font size on a given slide to make the content bigger or smaller than on other slides
  - *Switching off JavaScript reveals all slides*
- *Now move to next slide to see how it works*

What you need to do

- Each presentation is a single XHTML file
- Each slide is enclosed in * ... *
  - *The div element will be created automatically for h1 elements that are direct children of the body element.*
- Use regular markup within each slide
- The document head includes two links:
  - *The slide show style sheet: http://www.w3.org/Talks/Tools/Slidy2/styles/slidy.css*
  - *The slide show script: http://www.w3.org/Talks/Tools/Slidy2/scripts/slidy.js*
  - *Or you can link to the compressed version of the script which is about one seventh the size, see http://www.w3.org/Talks/Tools/Slidy2/scripts/slidy.js.gz*
  - *If you are using XHTML, remember to use </script> and </style> as per Appendix C.3*

```
<?xml version="1.0" encoding="utf-8"?>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Strict//EN"
 "http://www.w3.org/TR/xhtml1/DTD/xhtml1-strict.dtd">
<html xmlns="http://www.w3.org/1999/xhtml" lang="en" xml:lang="en">
<head>
  <title>Slide Shows in XHTML</title>
  <meta name="copyright"
   content="Copyright &#169; 2005 your copyright notice" />
  <link rel="stylesheet" type="text/css" media="screen, projection, print"
   href="http://www.w3.org/Talks/Tools/Slidy2/styles/slidy.css" />
  <script src="http://www.w3.org/Talks/Tools/Slidy2/scripts/slidy.js"
   charset="utf-8" type="text/javascript"></script>
  <style type="text/css">
    <!-- your custom style rules -->
  </style>
</head>
<body>
   ... your slides marked up in XHTML ...
</body>
</html>
```

To get the W3C Blue Style

The head element should include the following link to the style sheet:

```
<link rel="stylesheet" type="text/css" media="screen, projection, print"
 href="http://www.w3.org/Talks/Tools/Slidy2/styles/w3c-blue.css" />
```

The body element's content should start with the following markup:

```
<div class="background">
  <img id="head-icon" alt="graphic with four colored squares"
    src="http://www.w3.org/Talks/Tools/Slidy2/graphics/icon-blue.png" />
  <object id="head-logo" title="W3C logo" type="image/svg+xml"
    data="http://www.w3.org/Talks/Tools/Slidy2/graphics/w3c-logo-white.svg"><img
   src="http://www.w3.org/Talks/Tools/Slidy2/graphics/w3c-logo-white.gif"
   alt="W3C logo" id="head-logo-fallback" /></object>
</div>
```

This adds the logos on the top left and right corners of the slide.

You are of course welcome to create your own slide designs. You can provide different styles and backgrounds for different slides (more details later).

Use the *meta element* with *name*="*copyright*" for use in the slide show footer:

```
<meta name="copyright"
content="Copyright &#169; 2005-2009 W3C (MIT, ERCIM, Keio)" />
```

Upgrading from previous versions of Slidy

- This uses a new version of the HTML Slidy script
- It is designed to work better with other scripts, e.g. for UI controls within your slides
  - *Only adds one global name "w3c_slidy"*
  - *Doesn't interfere with other scripts that set event handers such as onload on body element*
- Works for slides delivered as text/html and application/xhtml+xml
- New presentation timer feature
- Initial prompt on first slide to help newcomers to Slidy
- Better support for styling slides and printing them
- Requires additional style rules, so new script won't work with old presentations without changes to their style sheets
  - *See slidy.css, and w3c-blue.css*
- But old presentations will work unchanged as they refer to the old script!

To use it off-line

- You can download slidy.zip and unzip it to create a Slidy directory on your machine
- If you have cvs access to the W3C site you can check out the Slidy directory
- Remember to periodically check for updates
- You then have two choices:
  1. *Use relative URIs depending on your local setup to access the appropriate files. Use the same directory structure as on the W3C server, ie, ".../2005/Talks/...".*
  2. *Run a Web server on your machine so that the directory above can be accessed via `http://localhost/Talks/Tools/Slidy2` and use the URIs of the form "/Talks/Tools/Slidy2/styles/slidy.css", "/Talks/Tools/Slidy2/scripts/slidy.js".*
- In both cases you can then publish your files on the W3C server unchanged.
- **NOTE** Internet Explorer on Windows XP now disables scripting for web pages loaded directly from the local file system, a work around is to use another browser, e.g. Firefox or Opera
- Please feel free to create your own designs, and help us to build a gallery of Slidy styles.
- My Google TechTalk (1st Feb 2006) uses a notebook themed style

Timing Your Presentation

- Sometimes it is handy to know just how much time you have to left to finish your presentation
- To get this feature, add the following markup to the content of the head element, replacing 5 by the duration of your presentation in minutes

```
<meta name="duration" content="5" />
```

- The time left in minutes and seconds is shown in the footer next to the slide number
- The clock starts to run when you move away from the first slide
- Moving back to the first slide pauses the clock

Generate a Title Page

If you want a separate title page with the W3C blue style, the first slide should be as follows:

```
<div class="slide cover">
 <img src="http://www.w3.org/Talks/Tools/Slidy2/graphics/keys.jpg"
  alt="Cover page images (keys)" class="cover" />
 <br clear="all" />
 <h1>HTML Slidy: Slide Shows in XHTML</h1>
 <p><a href="http://www.w3.org/People/Raggett/">Dave Raggett,</a>
 <a href="mailto:dsr@w3.org">dsr@w3.org</a></p>
</div>
```

The w3c-blue.css style sheet looks for the classes "slide" and "cover" on div and img elements using the CSS selector *div.slide.cover*

This technique can be used to assign your slides to different classes with a different appearence for each such class.

Slidy also allows you to use different background markup for different slides, based upon shared class names, as in "foo" below. Backgrounds without additional class names are always shown except when the slide isn't transparent. You may need to tweak your custom style sheet.

```
<div class="background foo">
   ... background content ...
<div>

...

<div class="slide foo">
   ... slide content ...
<div>
```

Incremental display of slide contents

For incremental display, use class="incremental", for instance:

An element is incrementally revealed if its parent element has class="incremental" or if itself has that attribute. Text nodes are not elements and are revealed when their parent element is revealed.You can use class="incremental" on any element except for
. Use class="non-incremental" to override the effect of setting the parent element's class to incremental.

Note: you will see a red asterisk on the left of the toolbar when there is still something more to reveal.

Incremental display of slide contents

For incremental display, use class="incremental", for instance:

- First bullet point

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For incremental display, use class="incremental", for instance:

- First bullet point
- Second bullet point

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- Third bullet point

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Incremental display of slide contents

For incremental display, use class="incremental", for instance:

- First bullet point
- Second bullet point
- Third bullet point

which is marked up as follows:

```
<ul class="incremental">
  <li>First bullet point</li>
  <li>Second bullet point</li>
  <li>Third bullet point</li>
</ul>

<p class="incremental">which is marked up as follows:</p>

<pre class="incremental">
 ...
</pre>
```

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Create outline lists with hidden content

You can make your bullet points or numbered list items into outlines that you can expand or collapse

- Just add *class="outline"* to the ul or ol element. Click on this list item for more details.
- Users will then see expand/collapse icons as appropriate and may click anywhere on the list item to change its state. This particular list item can't be expanded or collapsed.
- Add class="expand" to any li elements that you want to start in an expanded state.
  - *By default Slidy hides all the block level elements within the outline list items unless you have specified class="expand".*
  - *Such pre-expanded items can be collapsed by clicking on them.*
- Note expand/collapse icon highlighting requires browser support for :hover which isn't supported by IE6.

```
<ol class='outline'>
  <!-- topic 1 starts collapsed -->
  <li>Topic 1
    <ol>
        <li>subtopic a</li>
        <li>subtopic b</li>
    </ol>
  </li>
  <!-- topic 2 starts expanded -->
  <li class="expand">Topic 2
    <ol>
        <li>subtopic c</li>
        <li>subtopic d</li>
    </ol>
  </li>
</ol>
```

Make your images scale with the browser window size

For adaptive layout, use percentage widths on images, together with CSS positioning:

- CSS positioning is simpler and more reliable than using tables

```
<div class="slide">
  <h1>Analysts - "Open standards programming will become
  mainstream, focused around VoiceXML"</h1>
  <!-- use CSS positioning and scaling for adaptive layout -->
  <img src="trends.png" width="50%" style="float:left"
   alt="projected growth of VoiceXML" />

  <blockquote style="float:right;width: 35%">
    VoiceXML will dominate the voice environment, due to its
    flexibility and eventual multimodal capabilities
  </blockquote><br clear="all" />

  <p style="text-align:center">Source Data Monitor, March
  2004</p>
</div>
```

To work around a CSS rendering bug in IE relating to margins, you can set display:inline on floated elements.

Incremental display of layered images

These can be marked up using CSS relative positioning, e.g.

```
<div class="incremental"
 style="margin-left: 4em; position: relative">
  <img src="graphics/face1.gif" alt="face"
   style="position: static; vertical-align: bottom"/>
  <img src="graphics/face2.gif" alt="eyes"
    style="position: absolute; left: 0; top: 0" />
  <img src="graphics/face3.gif" alt="nose"
    style="position: absolute; left: 0; top: 0" />
  <img src="graphics/face4.gif" alt="mouth"
    style="position: absolute; left: 0; top: 0" />
</div>
```

You should also use transparent GIF images to avoid the IE/Win bug for alpha channel in PNG. A fix is expected in IE 7. A work around is available on skyzyx.com. My thanks to ACID2 for the graphics.

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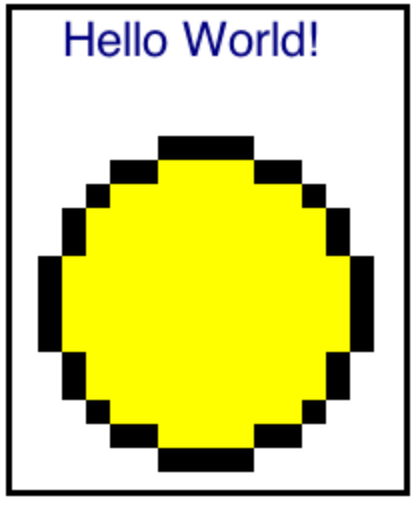

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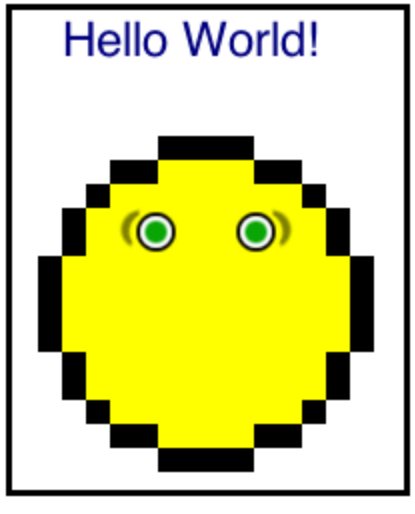

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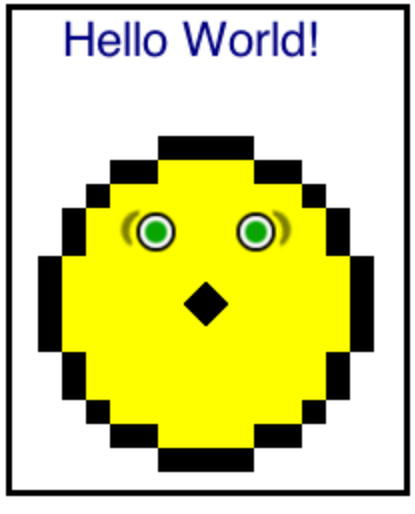

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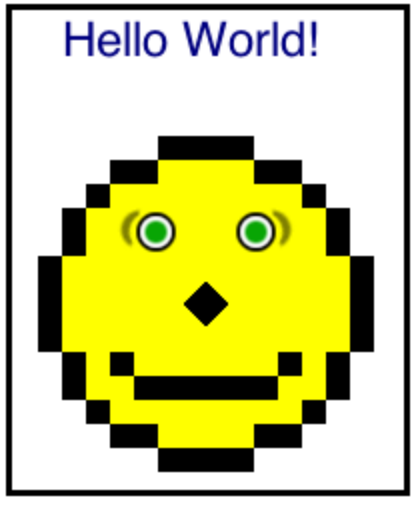

How to center content vertically and horizontally

Within the div element for your slide:

```
<div class="vbox"></div>
<div class="hbox">
Place the content here
</div>
```

and style it with the following:

```
div.vbox {
  float: left;
  height: 40%; width: 50%;
  margin-top: -220px;
}
div.hbox {
  width:60%;  margin-top: 0;
  margin-left:auto; margin-right:auto;
  height: 60%;
  border:1px solid silver;
  background:#F0F0F0;
  overflow:auto;
  text-align:left;
  clear:both;
}
```

The above styling is included in w3c-blue.css, which is designed to be used with slidy.css,

Include SVG Content

Inclusion of SVG content can be done using the object element, for example:

has been achieved by:

```
<object data="graphics/example.svg" type="image/svg+xml"
  width="50%" height="10%" title="Indian Office logo">
    <img src="graphics/example.png" width="50%"
         alt="Indian Office logo" />
</object>
```

This ensures that the enclosed png is displayed when the browser has no plugin installed or can't display SVG directly. Providing such a fall back is very important! Don't forget the alt text for people who can't see the image.

However, there are caveats, see the next slide!

Caveats with SVG+object

Adobe has recently withdrawn support for its SVG Viewer, so you are recommended to consider alternatives. If you still using the Adobe SVG viewer you should be aware of bugs when using the it with IE, Namely:

- Most modern browsers generally support SVG SVG Tiny 1.1 or better natively without the need for a plugin
- If you need to use Internet Explorer you are advised to upgrade to IE9 which includes native support for SVG.
- Patches to Internet Explorer mean that the Adobe SVG Viewer version 3.03 no longer works with IE6. You are therefore recommended to uninstall version 3.03 and instead install Adobe SVG Viewer 6.0 preview if this is available to to you.
- IE6 makes a *copy* of the SVG file on the local disc when displaying it; but doesn't pass the original URI to the plugin
- As a result relative references from within the SVG to external resources (scripts, CSS, images, other SVG) will break.
- The work around is to use absolute references within your SVG.
- On Windows, the Adobe SVG plugin doesn't respect the CSS z-index property, and if used on backgrounds will always show through other content

Additional Remarks

- Slides are auto-numbered on the slide show footer
- You can link into the middle of a slide show:
  - *It works out which slide you want and hides the rest*
  - *You can even link between slides in the same slide show*
  - *Individual sides can be addressed with the syntax #(slide number),*
    e.g. slide 3 of this presentation is: http://www.w3.org/Talks/Tools/Slidy#(3)
    - Previous versions of Slidy used square brackets, which will also work.
  - *Note that the browser's back/forward buttons may not work as you might expect due to browser problems.*
- Adding "title" to the list of classes for div elements that serve as title pages will render the corresponding entry in the table of contents in bold italic text (press "C" now for an example)
- If your slides have more content than normal, use a *meta element* to request a smaller font
  - *the following requests fonts to be one step smaller than the Slidy default for the current window width, and positive integers will make the fonts correspondingly larger*

```
<meta name="font-size-adjustment" content="-1" />
```

  - *Slidy uses JavaScript to dynamically set the font size on the body element, but it is okay to specify relative font changes on other elements within your own style sheet, e.g.*

```
div.slide.large { font-size: 200% }
```

- You are encouraged to ensure your markup is valid. HTML Tidy can be used to find and correct common markup problems
- The slide show script and style sheet can be used freely under W3C's software licensing and document use policies
- At XTech2006 I gave this presentation on Slidy (Paper).

Localization and automatic translation

Slidy now includes support for localization

"es":this.strings_es, "ca":this.strings_ca, "cs":this.strings_cs, "nl":this.strings_nl, "de":this.strings_de, "pl":this.strings_pl, "fr":this.strings_fr, "hu":this.strings_hu, "it":this.strings_it, "el":this.strings_el, "jp":this.strings_ja, "zh":this.strings_zh, "ru":this.strings_ru, "sv":this.strings_sv

- The tool bar is localized according to the language of the presentation
- This is taken from the xml:lang or lang attributes on the html element
- The help file is selected based upon your browser's language preferences
- As of 29th July 2010, the languages supported are: English, Spanish, Catalonian, Czech, Dutch, German, Polish, French, Hungarian, Italian, Greek, Japanese, Chinese, Russian and Swedish
- If you would like to contribute localizations for other languages, please get in touch with Dave Raggett <dsr@w3.org>
- The following illustrates what was used for Spanish

```
// for each language there is an associative array
  strings_es: {
    "slide":"pág.",
    "help?":"Ayuda",
    "contents?":"Índice",
    "table of contents":"tabla de contenidos",
    "Table of Contents":"Tabla de Contenidos",
    "restart presentation":"Reiniciar presentación",
    "restart?":"Inicio"
  },
  help_es:
    "Utilice el ratón, barra espaciadora, teclas Izda/Dcha, " +
    "o Re pág y Av pág. Use S y B para cambiar el tamaño de fuente.",
```

Note: Slidy now works with current slides translated into French. Use right mouse button to open frame without Google header. To disable automatic translation of the content of particular elements add `class="notranslate"`, see breaking the language barrier.

Future Plans

Recent additions have included a table of contents, and a way to hide and reveal content in the spirit of outline lists. The script has been rewritten to make it easier to combine with other scripts, e.g. for UI controls, and support swipes for navigation on touch screen devices. Further work is anticipated on the following:

- Collecting a gallery of good looking slide themes
  - *Opportunities for graphics designers!*
- Bob Ferris has worked on a number of UI extensions which could be incorporated into the W3C slidy script.
- Getting SVG Tiny to work on IE without need for SVG plugin
  - *Using scripts to dynamically convert SVG Tiny to VML*
  - *Note that IE9 introduces native SVG support, so it may no longer be worth working on SVG to VML for rendering of SVG*
- Pre-alpha version of wysiwyg slide editor (see screenshot)
  - *Using contentEditable when available, otherwise falling back to textarea and plain text conventions*
  - *Using XMLHttpRequest to dynamically reflect changes to server*
- Mechanism for remotely driving Slidy as part of distributed meetings
  - *Using XMLHttpRequest to listen for navigation commands*
  - *Using VoIP for accompanying audio and teleconferencing*
  - *Synchronizing recorded spoken presentation with currently viewed slide*
- Filters from PowerPoint and Open Office
  - *and export to PDF via PrinceXML*

If you have comments, suggestions for improvements, or would like to volunteer your help with further work on Slidy, please contact Dave Raggett <dsr@w3.org>

Acknowledgements

- My thanks to everyone who sent in bug reports and feature requests
- Opera Software for implementing CSS @media projection and promoting the idea of using the Web for presentations with Opera Show
- Tantek Çelik for his pioneering work on applying JavaScript for slide presentations on other browsers
- Eric Meyer for taking this further with the excellent S5
- W3C's slidemaker tool, which uses a perl script to split an html file up into one file per slide with navigation buttons
- Early versions of HTML Tidy which supported a means to create presentations via splitting html files on h2 elements
- Many sites with advice on JavaScript work arounds for browser variations
- Microsoft for pioneering contentEditable and XMLHTTP which both provide tremendous opportunities for Web applications
- Microsoft Office which provided the impetus for creating Slidy as a Web-based alternative to the ubiquitous use of PowerPoint

Note that while Slidy and S5 were developed independently, both support the use of the class values "slide" and "handout" for div elements. Slidy doesn't support the "layout" class featured in S5 and Opera Show, but instead provides a more flexible alternative with the "background" class, which enables different backgrounds on different slides.

Acknowledgements

The following people have contributed localizations:

- Emmanuelle Gutiérrez y Restrepo, Spanish
- Joan V. Baz, Catalan
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- Ruud Steltenpool, Dutch
- Beat Vontobel, German
- Krzysztof Kotowicz, Polish
- Tamas Horvath, Hungarian
- Creso Moraes, Brazilian Portuguese
- Giuseppe Scollo, Italian
- Konstantinos Koukopoulos, Greek
- Yoshikazu Sawa (澤 義和), Japanese
- Shelley Shyan, Chinese
- Andrew Pantyukhin, Russian
- Saasha Metsärantala, Swedish

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- Gerald Senarclens de Grancy
- Jared Duke
- Rick Byers
- Steve Robertson