

Accessible Online Forms

A Monash University ArtsIT Information Resource

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1.0 Introduction

Within the Arts Faculty when creating simple online forms that collect and email data we use CGI-Mailer. This Information Resource pools W3C [WAI][Web Accessibility Initiative] information on coding accessible HTML forms and relates it to the Monash publishing environment. This document assumes a certain level of proficiency in coding HTML.

Online Resources:

- Monash University [ITS CGI-Mailer][<http://www.its.monash.edu/web/resources/cgi-mailer.html>] homepage.
- [Martin Gleeson's CGI-Mailer][<http://martin.gleeson.com/cgi-mailer/>] homepage.
- ArtsIT Information Resource [From Form To Spreadsheet][[/it/artsweb/info_resource/form/index.html](http://it.artsweb/info_resource/form/index.html)].
- [W3C WAI][<http://www.w3.org/WAI/>] homepage.
- [Index of the HTML 4 Elements][<http://www.w3.org/TR/html4/index/elements.html>]

2.0 WAI Guidelines

What are the relevant [WAI][Web Accessibility Initiative] Guidelines that apply when coding HTML forms?

- Priority 2:
 - 10.2 Until user agents support explicit associations between labels and form controls, for all form controls with implicitly associated labels, ensure that the label is properly positioned.
[\[http://www.w3.org/TR/WCAG10/wai-pageauth.html#tech-unassociated-labels\]](http://www.w3.org/TR/WCAG10/wai-pageauth.html#tech-unassociated-labels)
 - 12.3 Divide large blocks of information into more manageable groups where natural and appropriate.
[\[http://www.w3.org/TR/WCAG10/wai-pageauth.html#tech-group-information\]](http://www.w3.org/TR/WCAG10/wai-pageauth.html#tech-group-information)
 - 12.4 Associate labels explicitly with their controls.
[\[http://www.w3.org/TR/WCAG10/wai-pageauth.html#tech-associate-labels\]](http://www.w3.org/TR/WCAG10/wai-pageauth.html#tech-associate-labels)
- Priority 3:
 - 9.4 Create a logical tab order through links, form controls, and objects.
[\[http://www.w3.org/TR/WCAG10/wai-pageauth.html#tech-tab-order\]](http://www.w3.org/TR/WCAG10/wai-pageauth.html#tech-tab-order)
 - 9.5 Provide keyboard shortcuts to important links (including those in client-side image maps), form controls, and groups of form controls.
[\[http://www.w3.org/TR/WCAG10/wai-pageauth.html#tech-keyboard-shortcuts\]](http://www.w3.org/TR/WCAG10/wai-pageauth.html#tech-keyboard-shortcuts)
 - 10.4 Until user agents handle empty controls correctly, include default, place-holding characters in edit boxes and text areas.
[\[http://www.w3.org/TR/WCAG10/wai-pageauth.html#tech-place-holders\]](http://www.w3.org/TR/WCAG10/wai-pageauth.html#tech-place-holders)

For more information on other guidelines which may affect your HTML coding please see the WAI's [Checklist of Checkpoints for Web Content Accessibility Guidelines 1.0][<http://www.w3.org/TR/WCAG10/full-checklist.html>].

3.0 Guideline 10.2/12.4

10.2 Until user agents support explicit associations between labels and form controls, for all form controls with implicitly associated labels, ensure that the label is properly positioned.

[<http://www.w3.org/TR/WCAG10/wai-pageauth.html#tech-unassociated-labels>]

12.4 Associate labels explicitly with their controls.

[<http://www.w3.org/TR/WCAG10/wai-pageauth.html#tech-associate-labels>]

Example 1:¹

If the form input field is sitting next to it's associated text.

```
<label for="firstname">First name:
  <input type="text" name="fname" id="firstname">
</label>
```

Example 2:²

This example gives and example of what to do if a table is used to format the form.

```
<table>
<caption>Form Field in Table</caption>
  <thead>
    <tr>
      <th><p>Field Name</p></th>
      <th><p>Input</p></th>
    </tr>
  </thead>
  <tbody>
    <tr>
      <td><p><label for="lname">Last Name</label></p></td>
      <td><p><input type="text" name="lastname" id="lname"></p></td>
    </tr>
  </tbody>
</table>
```

Both of the above examples use the <input> element. Remember that is the <textarea> element is used it also must be associated to it's label in the same manner.

Note: The key thing to remember when using the <label> element is that the “for” attribute is identical to the <input> elements “id” attribute.

¹ W3C, HTML Techniques for Web Content Accessibility Guidelines 1.0: 11.3 Labeling form controls (<http://www.w3.org/TR/WCAG10-HTML-TECHS/#forms-labels>) [Accessed 10/10/03].

² W3C, Forms in HTML documents: 17.9.1 The LABEL element (<http://www.w3.org/TR/html401/interact/forms.html#edef-LABEL>) [Accessed 10/10/03].

4.0 Guideline 12.3

12.3 Divide large blocks of information into more manageable groups where natural and appropriate.

[<http://www.w3.org/TR/WCAG10/wai-pageauth.html#tech-group-information>]

When you have a series of form inputs that could logically be grouped together they can be group together (using the <fieldset> element) and given a title (using the <legend> element). This can be seen in the below example:³

```
<fieldset>
  <legend>Personal information</legend>
  <label for="firstname">First name: </label>
  <input type="text" id="firstname" tabindex="1">
  <label for="lastname">Last name: </label>
  <input type="text" id="lastname" tabindex="2">
</fieldset>
```

Another set of information that can be grouped in a form are the options in a dropdown menu. They can be grouped by using the <optgroup> element like so:⁴

```
<select name="ComOS">
  <option selected label="none" value="none">None</option>
  <optgroup label="PortMaster 3">
    <option label="3.7.1" value="pm3_3.7.1">PortMaster 3 with ComOS .7.1</option>
    <option label="3.7" value="pm3_3.7">PortMaster 3 with ComOS 3.7</option>
    <option label="3.5" value="pm3_3.5">PortMaster 3 with ComOS 3.5</option>
  </optgroup>
  <optgroup label="PortMaster 2">
    <option label="3.7" value="pm2_3.7">PortMaster 2 with ComOS 3.7</option>
    <option label="3.5" value="pm2_3.5">PortMaster 2 with ComOS 3.5</option>
  </optgroup>
  <optgroup label="IRX">
    <option label="3.7R" value="IRX_3.7R">IRX with ComOS 3.7R</option>
    <option label="3.5R" value="IRX_3.5R">IRX with ComOS 3.5R</option>
  </optgroup>
</select>
```

³ W3C, HTML Techniques for Web Content Accessibility Guidelines 1.0: 11.2 Grouping form controls (<http://www.w3.org/TR/WCAG10-HTML-TECHS/#forms-grouping>) [Accessed 15/10/03].

⁴ W3C, HTML Techniques for Web Content Accessibility Guidelines 1.0: 11.2.1 Grouping menu options (<http://www.w3.org/TR/WCAG10-HTML-TECHS/#forms-group-options>) [Accessed 15/10/03].

The below figure shows the above HTML code displaying in Microsoft Internet Explorer 6.0.

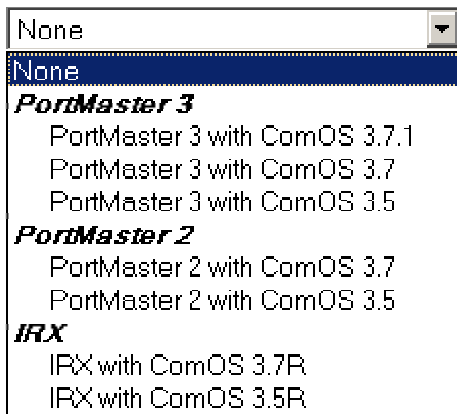


Figure 1 – Optgroup Displayed in Browser

5.0 Guideline 9.4

9.4 Create a logical tab order through links, form controls, and objects.

[<http://www.w3.org/TR/WCAG10/wai-pageauth.html#tech-tab-order>]

Through using the “tabindex” attribute we can create a logical tabbing order through different elements. This can be very important when the logical tabbing order isn’t the same as the order the elements are displayed on the page. The below example highlights this:⁵

```
<input tabindex="2" type="text" name="field1">  
<input tabindex="1" type="text" name="field2">  
<input tabindex="3" type="submit" name="submit">
```

⁵ W3C, HTML Techniques for Web Content Accessibility Guidelines 1.0: 11.1 Keyboard access to forms (<http://www.w3.org/TR/WCAG10-HTML-TECHS/#forms-keyboard-access>) [Accessed 15/10/03].

6.0 Guideline 9.5

9.5 Provide keyboard shortcuts to important links (including those in client-side image maps), form controls, and groups of form controls.

[<http://www.w3.org/TR/WCAG10/wai-pageauth.html#tech-keyboard-shortcuts>]

In the below example we can see how the “accesskey” attribute is used within the <label> element to provide a keyboard shortcut.⁶

```
<label for="user" accesskey="U">name</label>  
<input type="text" id="user">
```

The “accesskey” attribute can be used in the following elements:⁷

- A
- AREA,
- BUTTON,
- INPUT,
- LABEL,
- LEGEND,
- TEXTAREA.

Note: Access keys have been implemented within the new Monash University Visual Identity. For more information read this [Monash Accessibility information][<http://www.monash.edu.au/accessibility/>] page.

⁶ W3C, HTML Techniques for Web Content Accessibility Guidelines 1.0: 11.1 Keyboard access to forms (<http://www.w3.org/TR/WCAG10-HTML-TECHS/#forms-keyboard-access>) [Accessed 15/10/03].

⁷ W3C, Forms in HTML documents: 17.11.2 Access keys (<http://www.w3.org/TR/html401/interact/forms.html#edef-accesskey>) [Accessed 15/10/03].

7.0 Guideline 10.4

10.4 Until user agents handle empty controls correctly, include default, place-holding characters in edit boxes and text areas.

[<http://www.w3.org/TR/WCAG10/wai-pageauth.html#tech-place-holders>]

The below example shows place holding characters in the <textarea> element:⁸

```
<textarea name="yourname" rows="20" cols="80">
  Please enter your name here.
</textarea>
```

⁸ W3C, HTML Techniques for Web Content Accessibility Guidelines 1.0: 11.5 Techniques for specific controls (<http://www.w3.org/TR/WCAG10-HTML-TECHS/#forms-specific>) [Accessed 15/10/03].

8.0 Quick Guide

8.1 *Guideline 10.2/12.4*

```
<label for="firstname">First name:
  <input type="text" name="fname" id="firstname">
</label>

<table>
<tbody>
  <tr>
    <td><p><label for="lname">Last Name</label></p></td>
    <td><p><input type="text" name="lastname" id="lname"></p></td>
  </tr>
</tbody>
</ table>
```

8.2 *Guideline 12.3*

```
<fieldset>
  <legend>Personal information</legend>
  <label for="firstname">First name: </label>
  <input type="text" id="firstname" tabindex="1">
</fieldset>

<select name="ComOS">
  <option selected label="none" value="none">None</option>
  <optgroup label="PortMaster 3">
    <option label="3.7.1" value="pm3_3.7.1">PortMaster 3 with ComOS
    .7.1</option>
    <option label="3.7" value="pm3_3.7">PortMaster 3 with ComOS
    3.7</option>
    <option label="3.5" value="pm3_3.5">PortMaster 3 with ComOS
    3.5</option>
  </optgroup>
</select>
```

8.3 *Guideline 9.4*

```
<input tabindex="2" type="text" name="field1">
<input tabindex="1" type="text" name="field2">
<input tabindex="3" type="submit" name="submit">
```

8.4 *Guideline 9.5*

```
<label for="user" accesskey="U">name</label>
<input type="text" id="user">
```

8.5 *Guideline 10.4*

```
<textarea name="yourname" rows="20" cols="80">
  Please enter your name here.
</textarea>
```