Semantics and Structure (Exam 1)

⚠ This is a preview of the published version of the quiz

Started: Mar 4 at 12:48pm

Quiz Instructions

This exam references the **WAI before and after demonstration site** (http://webdevgroupcu.org /atlas4519/citylightsbad/Welcome%20to%20CityLights! %20%5BInaccessible%20Home%20Page%5D.html) . The pages on this site are **deliberately inaccessible**. We will use these pages to test your knowledge of basic HTML semantics and structure, such as headings, form labels, alternative text, etc.. Resources, including tutorials, are provided with each set of questions which you can use for help with your answers. (They are also listed separately on **Semantics and Structure Exam Resources page**).

This is an opportunity for you to assess your knowledge of key accessibility issues covered to date.

Question 1	6 pts

Topic 1: Headings & Page Structure

Refer to the **WAI Inaccessible News Page** (http://webdevgroupcu.org/atlas4519 /citylightsbad/Welcome%20to%20CityLights! %20%5bInaccessible%20News%20Page%5d.html) to answer the following 4 questions. Use the WAVE or ACCESS Assistant tool to determine the headings on the page. You'll notice that there is only 1 heading: a heading 1 (<h1>) for "Inaccessible News Page, Before and After Demonstration" at the top of the page.

This is the correct heading 1 for this page since it is a demo page. Pretend this is not a demonstration page, but just a real "City Lights News" site. In that case, what would be the correct heading 1 for this page? What other headings should be on the page and why? Do not just identify the content that should be headings, indicate the heading level for that content - i.e. heading 1, heading 2, etc.

If you cannot answer this question or the rest of the questions under this topic, refer to the **WAI heading tutorial** (https://www.w3.org/WAI/tutorials/page-structure/headings/) or the one at **Teach Access** (https://teachaccess.github.io

[/tutorial/#/3)](#) .

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Question 2　　　　　　　　　　　　　　**4 pts**

What are the opening and closing tags for a heading 2?

○　<h2>heading text goes here</h2>

○　<head2>heading text goes here</head2>

○　(h2)heading text goes here(/h2)

Question 3　　　　　　　　　　　　　　**2 pts**

True or False. It is okay to mark up text as a heading, even if does not functionally serve as a section heading, in order to achieve a certain font size and style.

○ True

○ False

Question 4　　　　　　　　　　　　　　　　　　　0 pts

For 3 points extra credit: write out the code for each heading you identified in question 1. For example, for the existing h1 heading already present on the page, the code is:

<h1>Inaccessible News Page, Before and After Demonstration</h1>

What would the mark up look like for the additional headings you identified?

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Question 5   **4 pts**

Aside from the fact that marking up headings with the proper HTML coding (<h1>...</h1> for example) follows accessibility guidelines, what else does it accomplish on a functional level, especially for a blind user?

Aside from screen reader benefits, what other benefits are provided by a page properly structured with headings.

If you need help answering this question refer to the tutorials mentioned above: **WAI heading tutorial**   **(https://www.w3.org/WAI/tutorials/page-structure/headings/)** , **Teach Access heading tutorial**   **(https://teachaccess.github.io/tutorial/#/3)** or the **WAI Easy Checks guide on headings**   **(https://www.w3.org/WAI/test-evaluate /preliminary/#headings)** .

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Question 6	14 pts

Topic 2: Images and Alternative Text

The following questions refer to the **WAI Inaccessible Home Page (http://webdevgroupcu.org/atlas4519/citylightsbad/Welcome%20to%20CityLights!%20%5BInaccessible%20Home%20Page%5D.html)** . Use the "show annotations" (near the top middle of page below horizontal menu bar) to see an explanation of the errors on the page. Some of the annotations will provide information on how the images on the page have been improperly marked up.

Look at all the images on the page that are listed below. Using the **WAI Web Accessibility Tutorial on Image Concepts** **(https://www.w3.org/WAI/tutorials/images/)** as a reference, identify the type of images that are on the page: are they informative, decorative, functional, etc., as defined by the resource?

Your report should look something like the following:

Image	Type of Image		
City Highlights logo			
Cloud in front of sun image			
Home button on left menu			
Image of "C" in article title on heat wave			
Man with cap and sun visor on head			
"More" link			
Image of flower			

(Note: we will be adding two other pieces of information for each image above so

you should enter the above information into a 4-column table).

Display the Alternative Text

Next, use the WAVE or ACCESS Assistant or another tool of your choosing to display the alternative text, if any, for the images on the page. (Tip: in Access Assistant, select "preview modes," then "images," then "highlight all images." Return to the web page and select the up arrow that surrounds each image. The alternative text, if any, will be displayed.)

Again, using the **WAI Web Accessibility Tutorial on Images (https://www.w3.org/WAI/tutorials/images/)** as a guide, enter appropriate alternative text for each image listed above. In a fourth column explain your choice of alt text. For example, "I used null alt text because this is a decorative image which conveys no important information to a screenreader user." For the City Lights logo explain why or why not you are using the provided alt text. (Hint: the answer is provided in the annotations).

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Question 7   **10 pts**

Topic 3: Semantic Links

To review the topic of semantic links we will return to the **WAI Inaccessible Home Page** **(http://webdevgroupcu.org/atlas4519/citylightsbad /Welcome%20to%20CityLights!%20%5BInaccessible%20Home%20Page%5D.html)** .

Note the links on the page. Considering the **WebAIM article on links (https://webaim.org/techniques/hypertext/)** or **guidelines 11 - 14 from this Redish and Theofanos article** **(https://redish.net/wp-content/uploads /Theorfanos_Redish_InteractionsPaperAuthorsVer.pdf)** , which link text would you change on the page. For now you can ignore the fact that the "home", "news", and "more" links are graphics without alternative text. Pretend they are text links. What text links or alternative text would you provide?

(Suggestion: you can also use the **Screen Reader Simulator for Chrome (https://silktide.com/resources/toolbar)** , **NVDA for Windows (https://www.nvaccess.org/download/)** , or the built-in VoiceOver for the Mac and iOS to hear how the links sound when moving from link to link or through the page. Instead of the aarp.org page that Redish and Theofanos mentions in their guidelines for examples of meaningful link text I suggest looking at the the **Law Office of Lainey Feingold** **(https://www.lflegal.com/)** site instead.)

Your response should present the original link text followed by your revision:

More | [your revised link text]

Read More | [your revised link text]

Click Here | [your revised link text]

etc.

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Question 8   **3 pts**

Besides screen reader users, who/what else benefits from semantically meaningful link text?

Question 9   **3 pts**

Topic 4: Forms

The following questions refer to the **WAI Inaccessible Survey Page** **(http://webdevgroupcu.org/atlas4519/citylightsbad/annotated /Welcome%20to%20CityLights! %20%5BAnnotated%20Inaccessible%20Survey%20Page%5D.html)** . Use the "show annotations" (near the top middle of page below horizontal menu bar) to see an explanation of the errors on the page. The annotations will provide information on how the form fields and other form elements on the page have been improperly marked up.

Most of the errors on the page involve *labeling*, *grouping* and *instructions*. (You can read about these concepts on the **WAI Forms Tutorial** **(https://www.w3.org /WAI/tutorials/forms/)**). Now look at the **WAI Accessible Survey Page** **(http://webdevgroupcu.org/atlas4519/citylightsbad/annotated/Citylights%20Survey %20%5BAnnotated%20Accessible%20Survey%20Page%5D.html)** and look through the annotations. Note the changes that have been implemented.

As noted in the first annotation on the accessible page the first change made has been to provide instructions to the user. Note how optional fields have been indicated.

Can you think of another way of providing instructions and indicating required fields? Enter your answer below.

If you need help answering this question or any of the form questions that follow, use the **WAI Forms Tutorial** **(https://www.w3.org/WAI/tutorials/forms/)** .

Question 10   10 pts

Go through the other notations on the Accessible Survey Page and note the other changes that have been made to the page. (You can skip annotation #7 regarding the table).

Now compare the inaccessible page to the accessible one. I suggest also listening to each page through a screenreader such as VoiceOver (OS) or **NVDA (https://www.nvaccess.org/)** (Windows) or with the **Disability simulator for the web (https://silktide.com/resources/toolbar/)** (Chrome extension).

Describe the improvements that have been made on the accessible page for both the visual and and screenreader (text to speech) user. What HTML tags were used to implement these improvements. Your answer should address:

- the use of *legend* and *fieldset* tags
- field labels
- order of code (as mentioned in annotation #6)
- anything else you notice that has improved accessibility

Question 11   10 pts

The following is a snippet of code from the form on the Accessible Survey Page:

<form action="survey.php" method="post">
<p>Fields are required if not otherwise noted.</p>
<fieldset id="park">
<legend>Favorite Park</legend>
<p>Which is your favorite city park?</p>
<div style="float:left; width:40%;">
<p class="input"><input type="radio" name="res" id="nn" value="1"
checked="checked"> <label for="nn">None</label></p>
<p class="input"><input type="radio" name="res" id="cp" value="2"> <label
for="cp">Central Park</label></p>
<p class="input"><input type="radio" name="res" id="gp" value="3"> <label
for="gp">Grand Park</label></p>
</div>
<div style="float:left; width:40%;">
<p class="input"><input type="radio" name="res" id="jp" value="4"> <label
for="jp">Jurassic Park</label></p>
<p class="input"><input type="radio" name="res" id="sp" value="5"> <label
for="sp">South Park</label></p>

<p class="input"><input type="radio" name="res" id="ot" value="6"> <label for="ot">Other</label></p>
</div>
</fieldset>

Copy the above code into your "code playground" tool, such as jsFiddle, or equivalent.

Once you preview the page, notice what happens when you click on a radio button label.

Now try pasting the following code into the viewer:

<form action="survey.php" method="post" id="collegsurvey">

<p>Fields are required if not otherwise noted.</p>

<p>What year of college are you in?</p>
<div style="float:left; width:40%;">
<p class="input"><input type="radio" name="cyear" id="fr" value="1"><label for="fr">Freshman</label></p>
<p class="input"><input type="radio" name="cyear" id="so" value="2"> Sophmore</p>
<p class="input"><input type="radio" name="cyear" id="jn" value="3"> Junior</p>

</div>
<div style="float:left; width:40%;">
<p class="input"><input type="radio" name="cyear" id="sn" value="4"> Senior</p>
<p class="input"><input type="radio" name="cyear" id="sn" value="4"> Graduate Student</p>
<p class="input"><input type="radio" name="cyear" id="sn" value="4"> Post Doc</p>

</div>

Try clicking on the radio button labels - except for the "Freshman" label, are the results similar to the other survey? Write your findings into the text field below.

Now, using the previous survey as a model, can you add the **legend**, **fieldset** and form **labels**. (Tip: I already entered the label code for "Freshman" above. Use that example for the rest of the radio buttons). Copy the updated code to your jsFiddle

or other "code playground" tool and provide the URL to your updated code into the text field below.

(Tip: you can also find example code for *legend*, *fieldset* and form *labels* at the **WAI Form Tutorial** **(https://www.w3.org/WAI/tutorials/forms/)**)

Quiz saved at 12:49pm　　Submit Quiz