

## Web-Based Application Design and Development (IT IS 3135)

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### Activity on Web Accessibility

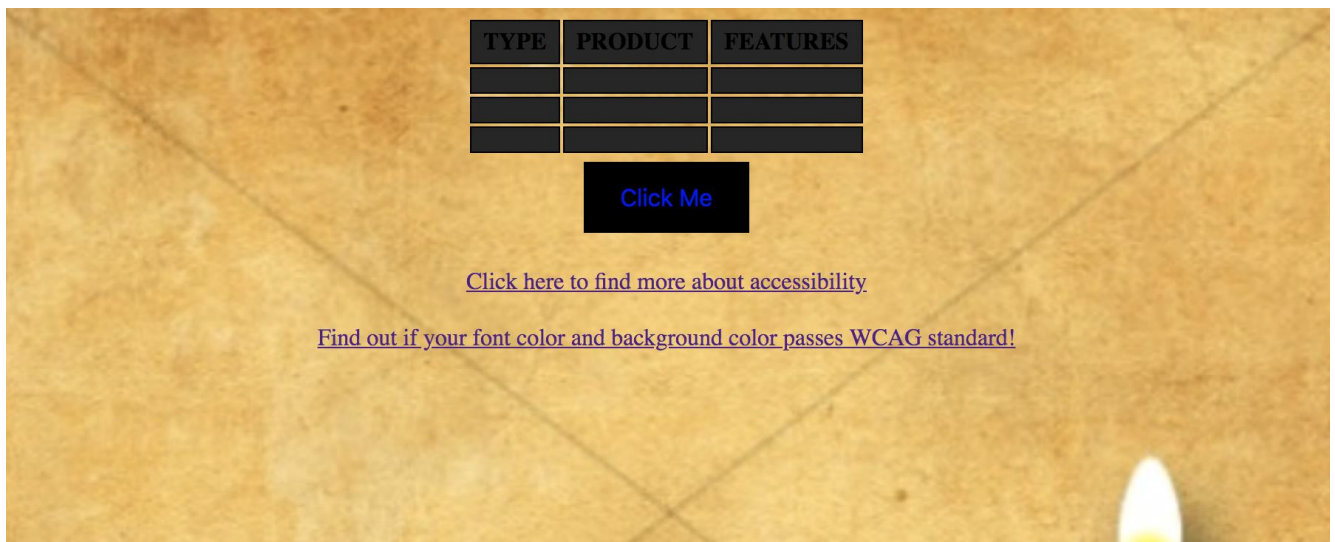
*In this activity, you will learn how to make your webpage more accessible.*

#### Part 0: Download the required files.

1. Download the **Activity\_Accessibility.zip** file and “extract all” to get the **Activity\_Accessibility** folder save it under the Exercise folder on your computer.
2. In this folder you will find **Activity\_Accessibility.html**, **Activity\_Accessibility.css** and **Activity\_Accessibility.js** files and a “images” folder.
3. Rename the files as **Lastname-Activity\_Accessibility.html**, **Lastname-Activity\_Accessibility.css** , **Lastname-Activity\_Accessibility.js** respectively.
4. Upload all these files and images folder to your webpages account.
5. Verify there are no errors. The webpage should look like the first figure shown below.
6. If the table is not properly formatted, make sure you update the link to the CSS file to point at the correct file.
7. At the bottom of the screen, click on the validation link. Verify that there are no errors on the page. You should periodically verify there are no errors as you complete the rest of the activity.

#### Part 1: Modify HTML page and apply accessibility rules.

You'll start with a webpage that looks like this:



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1. **Add accessible heading:** Add a heading on your page, called “Time to Twinkle”.

(Hint: <https://teachaccess.github.io/tutorial/#/3>)

2. **Create accessible table with accessible images:** Modify the HTML file to make the table and images accessible and add content to the table as shown below

(Hint: <https://webaim.org/techniques/tables/data>, <https://teachaccess.github.io/tutorial/#/4>)

- i. Add *caption*, called “Candles”.
- ii. The column “Type” should have the types of the candles. The columns ‘Product’ and ‘Features’ should have an Image (use the images from the ‘Images’ folder) and an un-ordered list, respectively. The table should look like this:

TYPE	PRODUCT	FEATURES
Birthday Candles		<ul style="list-style-type: none"> <li>• Comes in a range of fun, vibrant colors</li> <li>• Small and slender forms allow you to add as many or as few of them to a dessert as you desire</li> <li>• Offers a way to personalize customers' desserts on birthdays and anniversaries</li> </ul>
Votives		<ul style="list-style-type: none"> <li>• Inexpensive and easy to use</li> <li>• Bigger than tea lights to provide longer burn times, making them better for longer events</li> </ul>
Taper Candles		<ul style="list-style-type: none"> <li>• Commonly known as window candles</li> <li>• Long, slender constructions add dimension to table tops</li> </ul>

3. **Color Contrast:** Modify the button to have a light colored text on a dark background by using appropriate contrast ratio. You can refer to <https://dequeuniversity.com/rules/axe/3.2/color-contrast> to check if your contrast ratio holds good.
4. **Add Accessible form controls:** On clicking the button, you will be able to view an empty dialog box. Add a form with the following form controls, and an header so that it looks like the below figure:

1. Name (use aria-required attribute)
2. Email (add HTML5 validation and use aria-required attribute)
3. Submit Button

The form controls and the header should follow accessibility rules. On clicking the submit button, the dialog box should disappear and get back to the same page.

(Hint: <https://webaim.org/techniques/forms/controls>)

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5. Add Links to validate for errors in both CSS and HTML in the footer section.

**Note: This activity is to test your skills on web accessibility. Make sure you follow all the accessibility rules. You can refer to the following links to make your website accessible.**

<https://teachaccess.github.io/tutorial/#/2>

<https://webaim.org/>

<https://dequeuniversity.com/rules/axe/3.2/color-contrast>

### **Part 2: You must upload files to your public\_html space to get credit for assignment**

1. Follow the steps similar to your previous activities to upload your **Lastname-Activity\_Accessibility** HTML, CSS, JS files, and the images folder to your **Exercise** folder in the web server.
2. Open your web browser.
3. Type in `http://webpages.uncc.edu/yourUsername/Exercise/ Lastname-Activity_Accessibility.html`
4. Your browser should display the page.
5. At the bottom of the screen, click on the validation links. Verify that there are no errors on the page.
6. Disconnect your FileZilla ftp connection → Session → Disconnect
7. Verify the URL is working and your final webpages are accessible.
8. Now, you should log in to **Canvas**.
9. Go to **Activity\_Accessibility Submission** link on the **Canvas** page. Upload the **html, css and js** files to the submission page.
10. In the **Comment** textbox provide the URL of your **html** file on the web server. **You must provide the correct URL to get credit.**