Manually Testing a Website - Checklist

To check for accessibility and to ensure Section 508 compliance doesn't require extra time, or expensive technology. The checklist below goes over manual defects that can be identified and can correct about 75% of common accessibility issues. For more information contact the Assistive Technology Initiative Office at ati@gmu.edu or visit our website: http://ati.gmu.edu

☐   **1. Keyboard Access:** Keyboard access is one of the key components to an accessible webpage. Can you throw the mouse away and still access everything on the screen with just the keyboard? For this demonstration of keyboard access, we will test the order of links on a webpage (also called Tab Order- the order in which links are displayed).

How To: Open inaccessible example link: ***http://www.w3.org/WAI/demos/bad/before/home.html***

Beginner:
A.   Using the Web Accessibility Toolbar (WAT) in IE, Go to **Structure** and select **Tab Order Indicator.**
B.   Review the tab order shown on the page. If the numbers next to the links are in the proper reading order showing top to bottom, left to right, then it is accessible. If the tab order is out of order then a user may have problems accessing the material in the proper order.

Intermediate:
A.   Press the ***tab key*** on the keyboard and see if the focus moves from one link to another. You should be able to either see the focus displayed as a dotted line from link to link, or in the lower left hand corner, you will see the web url change as you press tab.
B.   Use a screen reader to test the tab order, the screen reader will read the title of each link as you press the **tab key**.

Notes for Keybaord Access	

☐ 2. **Links:** Make sure that links (and/or their associated ***title attributes***) are labeled correctly.

How to: Open inaccessible example link: ***http://www.w3.org/WAI/demos/bad/before/home.html***

Beginner:
A.   Using the Web Accessibility Toolbar (WAT) in IE, Go to **Doc Info dropdown menu** and select **List Links (new window)** which will open a new window with a report.
B.   Review the links provided in this report. This would be an example of what you are looking for multiple links with the same name such as "Click Here" or "For More Information ..." and links that have URLs that may not make sense such as www.cnn.com/news/story12345 whereas it should be something like www.cnn.com/news/story_PandaCam
C.   Other ways links may not be labeled correctly are if they do not have a text linked and are rather spelled out. For example: Link phrases and words rather than write out URLs such as www.cnn.com/news/story_PandaCam should be Panda Cam Story title linked.

 Intermediate: You can also use a screen reader such as NVDA or JAWS to access a list of links on a page. Using the keystroke **INSERT + F7** opens the dialog box where you will have a list of all of the links on the page and can see if the links have proper names, etc.

Notes for links	

☐ **3. Skip Navigation:** A "Skip to Content" or "Skip Navigation" link should be located on a webpage in the upper right or left hand side of the screen. This link will allow keyboard and screen reader users to quickly access the main content of the page without navigating through all the main menus and navigation bars.

How to: Review the links list for # 2. Select the Skip to content link if found and see where the focus takes you on the page.

> _Beginner:_ While viewing the report from the WAT, check the first few links under link content for a "Skip to Content" or "Skip Navigation" link. If you don't find one, use **CTRL + F** to open a "Find" toolbar at the top of the page and type the work "skip" then press enter. If "Skip" exists on that page, the word will be highlighted. If that option does not bring up results, then there is no skip to content link present.

> _Intermediate:_ Use a screen reader, such as JAWS, and open the links list **(Insert + F7)**. In the list, press the **"S"** key to search for all links that start with the letter "S" for Skip Navigation, Skip to Main, Skip to Content, etc. As you're pressing the **"S"** key, it will cycle through all of the links that start with "S". If you don't find one name "Skip to Content" or "Skip Navigation", then it's not included on the webpage.

Notes for Skip to Content link	

☐ **4. Logical Headings:** A "Heading" for a web page can be either the title of the page, or titles of sections of the page. Ensure that all logical headings use the HTML heading tags (<h1>, <h2>, <h3> etc,) in order of the first heading listed on the page, to the last heading. Numbering them correctly is important since it will allow the screen reader user to quickly access content on the page just by searching for headings.

How to: Open inaccessible link example: **http://www.w3.org/WAI/demos/bad/before/home.html**

> _Beginner:_ Using the WAT Toolbar in IE, go to **Structure** and select **Heading Structure**. Ensure that the heading structure list is in order (<h1>, <h2>) and that the subheadings are labeled as well.

> _Intermediate:_ Use a screen reader such as NVDA or JAWS to access a list of headings on a page.

> - For **JAWS**, press **Insert+ F6** to open a list of headings. Arrow down through the list to ensure that the headings are in the correct order and that the list does not skip subheadings.

> - For **NVDA**, press **Insert + F7** and select the Headings radio button at the top. This will bring up a list of headings on the page. Ensure that the headings are labeled and that the list does not skip subheadings.

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☐ **5. Images:** Check images used for presentation and importance for an appropriate ALT text. If the image is of importance the ALT text should be a text description of the image displayed. If the image serves no purpose other than design and aesthetics, the ALT text should be filled by empty quotes ("").

Note: Background images cannot have an alt text, therefore only images without informational content are allowed to be background images, or the information needs to be provided in an alternative way.

How to: Open the inaccessible link example: ***http://www.w3.org/WAI/demos/bad/before/home.html***

> *Beginner:* Using the WAT in IE, Go to **Images** and select **Show Images** to outline images and to show alt text on the page. (If you get an error message dialog box, select **OK** or **press enter** to close the message). Notice which images have No Alt attached to them.

> *Intermediate:* Use JAWS (screen reader) to check ALT text for images or "Graphics" on a page, by

> A. Press the JAWS quick navigation key for graphics **(G)** on a web page and listen to how JAWS reads the graphics. If it reads a short, but descriptive title, then you know that the image is labeled correctly. If it reads a long, drawn out label, or the name of the file image that does not represent the image, you know it's not labeled correctly.

> B. With JAWS, press **Insert + F3** to open the HTML elements dialog box. **Arrow down** to the graphics list and press enter. A separate list of all graphics will open. Check the list for the graphic labels. Do they correspond correctly to the images on the page?

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☐ **6. Tables:** There are two types of tables, one used for presentation and one for data. If Tables are being used to display anything other than simply presentation, ensure that table headings are listed as headings.

How to: Open link with inaccessible/accessible table examples: ***http://webaccessibility.gmu.edu/accesstable.html***

Beginner:

A.   Use the WAT in IE, Go to **Table** and select **Table Headers.** Any Headers will be highlighted. If you see a table that does not show a highlight then it is not set as a header.

B.   While viewing the table on the website - Use the WAT toolbar in IE, Go to **Table Show Data Tables** from the toolbar. Look for the **table header <th> tag** at the Header level of the table.

Intermediate: Use JAWS to find tables on a web page by pressing the quick navigation key for tables **(T)**. JAWS will cycle through the tables on the page and will read any presentation or data tables. If you come across a data table, **arrow down** through the table to a cell that contains data. Press **ALT + CTRL + Numpad 5** to check the heading order of the table. If the table headings are properly labeled, JAWS will read the Column heading, Row heading and the contents of the cell. If JAWS only reads the contents of the cell, then the table headings are not properly labeled.

Notes for Tables	

7. Form Fields: There are 2 things to check for accessibility when it comes to form fields 1) Ensure that the tab focus goes directly to each form field in the correct reading order of top to bottom, left to right. 2) Also ensure that form fields are labeled properly in the code. The code label should be same as the form name. For example, if the field label is First Name, then the code label should also be First Name.

How to: Open example link: ***http://www.foxyform.com/***

Beginner: Using the WAT in IE, select **Structure** and go to **Fieldset/Labels** from the toolbar. A dialog box will come up giving you the number of errors out of the number of form controls on the page. Any errors on the page will signify an invalid or missing label.

Intermediate: Use JAWS to find form fields (edit fields) and check the labeling of the edit fields by pressing **Insert + F3** to open the HTML features list. **Arrow down** to Edit Boxes List and **press enter**. This will open a list of all of the edit box labels on the page. Arrow down through the list to ensure that the labels correspond with the edit field.

Notes for Form Fields	

☐ **8. Error Messages on Form Pages:** The user must be able to quickly identify any form fields that are not filled out correctly. For example, if an email address is required but was not filled out on a form, the form is submitted and an error message occurs, the user needs to be able to quickly identify which fields are not filled out correctly. The error listing must receive focus directly after the user attempts to submit information to advance to the next screen.

How to: Open example link: **http://www.foxyform.com/**

> *Beginner:* The error message can be tested by selecting the **"Create Formular" button** without filling in any of the form fields. A dialog box will take to notify you of the errors. Does it tell you what the error is? Does it take you back to the specific area in which you need to make the change?
> - Each individual error listing must begin with the text "Error" to best convey information to assistive technologies.
> - The user must be able to navigate directly to fields in order to make corrections. Press the tab key to see if the focus can be navigated to the form field in error.

> *Intermediate:* Use JAWS to navigate to the **"Create Formular" button** by pressing the quick navigation key **"B"** for button. When JAWS reads the button name, **press enter**. The error dialog box will appear. Press **enter or escape** to close the dialog box.

Notes for Error Message on Form Pages	

☐ **9. Direct Focus of dialog boxes:** When a new dialog box (pop-up box or window) is displayed, does the focus move to this dialog box? For example, if there is an error message from filling out a form (*See # 8*) and a separate dialog box is displayed with an error message, does this box take focus over the webpage or application?

How to: Open example link: **http://www.foxyform.com/**

> *Beginner:* Select the **"Create Formular" button** and notice the dialog box that appears. Does it take focus? Can you press the tab key to access the **OK button**? You can also press **Ctrl + P** to see if the print dialog box appears to just print that specific dialog box.

> *Intermediate* Use JAWS to access the **"Create Formular" button** and **press enter** on the button. Does JAWS read the dialog box that appears? Can you tab to the **OK button**?

Notes for Direct Focus of Dialog Boxes	

10. CAPTCHA: CAPTCHA forms with distorted text or audio can cause a number of issues related to accessibility. Although there are workarounds available, the best approach may be to use a CAPTCHA that poses a logic question in plain text. Such questions are easy for humans to answer, but difficult for a machine.

How to: Open example link: ***http://www.foxyform.com/***

    A. CAPTCHA image cannot include ALT text for screen readers, because a bot would read it.

    B. Audio CAPTCHAs can interfere with screen readers unless a pause at the beginning is included.

    C. As spammers develop algorithms to break CAPTCHA systems, images and audio become more distorted, to the point where even many sighted users have difficulties identifying the text.

Notes for CAPTCHA	

11. Font Size: Check to see if the font size of the webpage can be re-sized.

How to: Open example link: ***http://www.overstock.com/***

    ALL: With the page open in **Internet Explorer** go to the **Tools** and select **Internet Options**. At the bottom right of the window select **Accessibility** and check the **"Ignore Font Styles" and "Ignore Font Sizes" check box.**

Notes for Font Size	

12. Color: Ensure that color is not the only means of communicating a concept or providing important information. For example: "All of the dates available below are in red". This would be an example of inaccessible data being displayed. This is important not only for those who are visually impaired, but for those who are color blind as well.

How to: Open example link: ***http://www.overstock.com/***

    ALL: With the page open in **Internet Explorer** go to the Tools and select **Internet Options**. At the bottom right of the window select **Accessibility** and check the **"Ignore Colors" check box**. This will allow you to determine if all information will still be displayed once color is taken away.

- Read through the text and look for any areas where color is being used to convey information (e.g. press the green button). Is the information presented some other way as well?

- To test for Colorblind Filter use: ηττπ://χολορφιλτερ.ωιχκλινε.οργ/

Notes for
Color:

☐ **13. Timed Responses:**   When using redirects or forms requiring a timed response, it is important to make sure adequate response time is given for mobility impaired users, users with screen readers and readers with cognitive impairments. All of these audiences require extra time to process instructions.

How to: This is commonly an issue for sites like online banking, ticket purchases, etc.
- **A.**   Are there any elements on the page that require a timed response, for example quizzes or automatically refreshing pages or any timed redirects?
- **B.**   Is the user warned before the time limit expires? Does a separate dialog box appear where the focus goes directly to the dialog box?
- **C.**   Is a method provided to allow the user to extend the time limit before time runs out?
- **D.**   Does the user have sufficient time to indicate that more time is required before the time limit is reached?
- **E.**   If the page does require a time response and the user has no option to extend the time or is not given an alert with enough time to extend the limit then it is not accessible. If the page does require a time response and the user has the option to extend the time and is given enough time to extend the limit, then the page is accessible.

Notes for
Timed
Responses:

☐ **14.** Video and Multimedia: Video and Multimedia need text alternatives; this could be through subtitles and transcripts.

How to: Open the webpage to your college, university or organization. Search for a video on this website.
- **A.**   If multimedia elements are present, do these elements have text alternatives such as subtitles and matching transcripts available? This could be either on the same page or on linked pages.
- **B.**   Are the alternate presentations synchronized with the original multimedia elements? For example, if there is a video of someone talking, do the captions run in time with the voice?

Notes for
Video and
Multimedia