**Assessment 1 – Structured Activities (ICTWEB452)**

**Task 3**

**You must complete questions and exercises as described below.**

***Preliminary Instructions*:**

A. Consult with your lecturer during the execution of the following tasks (Tasks 1 – 3).

B. Make sure you access the required organisational procedures, while you are working.

**QUESTIONS**

1. Visit the following page giving W3C “Web Design and Applications” standards: <https://www.w3.org/standards/webdesign/>

* For the web standard “Accessibility”, describe 3 design principles discussed in this standard: <https://www.w3.org/standards/webdesign/accessibility>
  + The Three design principles in Accessibility is Understandable, operable, and perceivable.
    - Understandable
      * Understandable is making sure your content is readable and understandable by providing a words without any difficult words, idioms, and any unusual words. Using the clear and simple word as possible.
    - Operable
      * Operable is how the people can navigate website without performing anything like a mouse or keyboard. Have the ability to stop or extend time limits if its necessary, hide or pause a scrolling content, and also people can easily navigate your website by having organized content.
    - Perceivable
      * Perceivable is how the information or text is represented to people who are blind that can only rely on text alternatives like short description of the image, icons, charts, a short description of non-text like audio and video files.
* Give a brief overview of 2 other standards that the World Wide Web Consortium (W3C) defines.
  + The two other standard that the World Wide Web Consortium defines are the HTML and CSS.
    - HTML
      * HTML also known as the Hypertext Markup language is a standard document that used to create a web pages. W3C making sure that the web pages are accessible to any one
    - CSS
      * CSS also know as cascade styling sheet is a styling document that is used to style your HTML such as fonts, spacing, colours, and so on, by following the W3C guide your web page access to people who have disability.

1. Give an overview of what HTML accessibility means.
   1. HTML accessibility means that web pages are accessible to the people who have disability by having a correct HTML elements like the main heading, content, and so on, so people with disability can navigate your website easily
2. Why would you make sure your HTML code is accessible?
   1. By having an accessible in my HTML code, I am allowing people with disability to make sure that my web page are working correctly for the people who uses assistive technology like screen reader, voice commands, keyboards, change the appearance of the website, change font size and so on.

4. **Browser accessibility features**

- For the following browsers, detail the accessibility features that are available:

* **Microsoft Edge**
  + Can changes the font size
  + Have the web read for you
  + You can also have image description or alt text
  + High visibility focus indicator
  + Can use keyboard without a mouse
  + You can also change your contrast for better readability
* **Firefox**
  + You can use keyboard without a mouse
  + You can change he page size, fonts, and colours
  + Change High contrast mode
  + They have screen readers
  + Compatible with assistive technology
* **Google Chrome**
  + You can use your voice to search something
  + You can use chrome accessibility extensions
  + Change the text, image, video size
  + Use keyboard without mouse
  + Have alt text
  + You can highlight part of the page your focused on
  + Use live caption
  + Reading mode

1. Give an overview of what HTML validation means and how you may validate your code.
   1. HTML validation means is to check if your web page or codes and to highlights any errors to help you to fix it and to make sure you are following with certain standard such as W3C accessibility standards. You can online tool to validate your code such as achecker, and the W3C Validator tool.
2. Why would you validate your HTML code?
   1. By doing a validating your HTML code this gives improvement, high quality, better search engine optimization or SEO ranking, and better performance to your webpage.

**EXERCISES**

1. Use one of the tools, of your choice from: <https://achecker.achecks.ca/checker/index.php> to assess the accessibility of the code you created for **exercise 1** and 2 from **Task 2**

* Note down any errors.
  + - Document language not identified.
* Change your code so there are no errors….
  + - Fix everything

2. Validate the code you created for **exercise 1 and 2** from **Task 2** using the validator at: <http://validator.w3.org/>

* Note down any errors.
  + - The element button must not appear as a descendant of the a element. From line 19, column 34; to line 19, column 41
    - Element li not allowed as child of element nav in this context. (Suppressing further errors from this subtree.) From line 28, column 9; to line 28, column 12
    - Stray end tag a. From line 19, column 64; to line 19, column 67
* Change your code so there are no errors….
  + - Fix everything

3. Test your webpages and complete the template given in the “Organisational Procedures and Guidelines” section: “Acceptance testing”.