A)

Q1. Discussion - On-Screen Keyboard:

The difficulty in Scenario 1.1 involves using the one-handed joystick to navigate the on-screen keyboard, which can be tedious and take a while. Individuals with motor impairments may experience difficulties with typing quickly and accurately, which would probably reduce their productivity. The benefit gives those who are unable to use a standard keyboard a different way of input. Using configurable layouts and predictive text tools to be able to improve typing accuracy and speed is one area for improvement.

It would be hard to use the mouse in Scenario 1.2 to point to keys and stay on the on-screen keyboard, especially for people with small motor impairments. The benefit is that it provides a different way of input for people who are unable to utilize regular input devices with ease. But the problem is that it's slower and less accurate than using a normal keyboard. Including programmable pointer settings to support different levels of motor control could be an upgrade.

Using the space bar key on the actual keyboard to be able to navigate the on-screen keyboard in Scenario 1.3 can be a time-consuming and challenging task. It would be difficult for those with motor impairments to effectively select certain keys. The benefit is that it gives people with poor motor control an additional input option. Adding customizable scanning options to change the speed and layout for more use is one upgrade idea.

Q2. Discussion - Magnifier:

Scenario 2.1: Because of differences in contrast and color combinations, it can be hard to access the news links on the Ryerson website using different high-contrast themes. High-contrast themes can improve reading for people with bad eyesight, but some themes can make it uncomfortable to look at or make it harder to notice some things. Giving more options of high-contrast themes that are flexible for different preferences and visual needs would be a very beneficial enhancement.

In Scenario 2.2, reading articles on the Toronto Star website using the magnifier presents challenges, especially in adjusting magnification settings for optimal readability. Individuals with low vision may struggle to find the right magnification level and settings that suit their needs. The advantage is that the magnifier tool enhances visibility, but the disadvantage is the potential distortion or loss of context when magnifying specific areas. An improvement could be implementing intelligent magnification algorithms to prioritize important content and reduce visual clutter.

In Scenario 2.2, using a magnifying glass to read articles on the Toronto Star website causes difficulties, especially if altering the magnification level types for the best visibility. Finding the ideal magnification level types and settings might be very hard for those people with low vision. The magnifier tool can improve sight; but, when expanding some sections, it may cause distortion or cause context to be lost. Using smart magnification algorithms to prioritize content and minimize visual mess would be a good improvement.

Q3. Discussion - Speech to Text:

There is definitely many reasons why the Narrator reads menu items differently from how they are shown visually, including the way the application's programming logic looks, the user interface is set up, and how text is organized in the underlying code. For instance, rather than focusing on reading objects based to their visual display on the screen, the Narrator could do this based on the order that makes sense or grouping. Also, the Narrator's interpretation of specific parts may vary depending on the accessibility elements or metadata linked to the content. The goal of the changes is to enhance the user experience for those who utilize speech-to-text technology by giving more effective digital content access and understanding.

B)

- 1. One of the accessibility features that are built into the website's navigation bar is the **colour scheme selector**, this is able to give the users an option to be able to pick between the different colour schemes for a easier reading experience. Users have the choice to pick a light or dark coloured theme based on whatever is better for them at the end of the day. Users who may find certain colour combinations very hard on their eyes or who have difficulty on seeing will probably be able to find this feature to be helpful or even mandatory. The website aims to be able to improve access and user experience for all users by providing lots of options for them to choose from the actual site.
- 2.: The second feature is the **text-to-speech** button which will read out the contents of the website out loud to the user. This feature can be helpful to those who are hard of hearing since now they would be able to hear what it is that I am talking about in my website for them. This is a very useful feature.
- 3. There are a lot of features that are added to the website's navigation bar such as the **text resize option**, which would be able to make the users on the website to be able to change the webpage's font size. The important reason for this feature comes from a user's disability to see properly or see small text a lot better. Users can adjust the text size to their preferred level of comfort by using the buttons that is next to the information that will be able to increase or decrease the font size for them. Users who have visual problems or who like larger or smaller text sizes for

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improved readability will be able to benefit from this choice. The website improves accessibility by making sure that all users can interact with the content by providing font resize functionality.