Lab 12: Component Driven Development with Accessibility in Mind
Component libraries are important for consistent and reusable development. Unfortunately, many of them often lack built-in accessibility features, requiring developers to add them manually. Other times, the library comes with accessibility features but it gets overlooked during the developer implementation.

Objectives
In this lab you will:

- Investigate the accessibility support of Materialize libraries framework
- Employ Bootstrap accessible framework to create a component with accessibility in mind.

Instructions
You need to have Google Chrome, a code editor like Visual Studio Code, screen reader (NVDA or VoiceOver) installed on your computer.
Lab Submission
On Brightspace, upload one zip file with HTML and word document.

- Include the student names in the files.
- Ensure the document file contains clear headings.

Question 1 :
Evaluate Materialize JavaScript framework for its accessibility support and answer the five points below. Submit your answers in word document and submit the materialize html

- **Question 1.1: Review accessibility documentation:** Check the documentation on the website and comment on the accessibility coverage

After reviewing the documentation on https://materializecss.com/about.html I didn't come across much mention of accessibility. After inspecting the pages using Wave, I came across the use of some Aria being used but still having many errors on the documentation itself as well as the theme pages they provide.

- **Question 1.2: Assess demo page:** Choose any of the theme pages https://materializecss.com/themes.html and assess it using manual and accessibility testing to build an impression on accessibility and comment on the WCAG adherence. Indicate which theme you assessed.

For this question I used the third option which was Gallery Shopify theme. From what I see the website is lacking severely in being accessible to all users. With many contrast errors, images missing alternative text, missing form labels and alerts ranging from skipped headings, text that is too small and redundant links it is clear that the site needs a lot of work before it can be considered accessible.
Some WCAG issues this theme faces are as follows:

- 2.4.6 Headings and Labels (Level AA)

- [1.4.3 Contrast (Minimum) (Level AA)](#)

- **Question 1.3: Assess component:** Create a page materialize_studentName.html with Materialize Accordion component https://materializecss.com/collapsible.html and comment on respect of the accessible Accordion Pattern from WAI-ARIA practices https://www.w3.org/WAI/ARIA/apg/patterns/accordion/.

Based on the accordion pattern website, the keyboard accessibility is not working, and I noticed Aria-expanded is not set to true or false when it is open or closed. Aria attributes such as Aria controls, Aria-label and Aria-labelledby are missing.

- **Question 1.4: Review rates and feedback:** Search online for user reviews, discussions, or feedback on issues related to accessibility are often discussed in these spaces.

For this repo there is one user discussing a label tag issue. They've mentioned that when a style is applied to certain lists using the select tag, combined with label tags this will break the connection between the two. The user mentions that the fix would be to add an ID for an input field and to make sure to add a new ID to ensure the accessibility components are still intact. https://github.com/Dogfalo/materialize/issues/3490

- **Question 1.5: Community support:** Search online and comment on community support and response time for fixing issues. Do they have a GitHub page? Include the link

For this question I scrolled down to the very bottom of https://materializecss.com/collapsible.html and clicked on the chat button to gather my information. The discussion board has users asking questions ranging from code to why links by the company do not seem to work. Most questions that I came across were either resolved by the user themselves after a few hours or days after posting while some were just general questions about if other users may have bought the entire themes bundle. For the most part, the discussion forum seems to be relatively active. I do feel, however, that if a user was having a problem that needed to be resolved in a timely manner to use an alternative way of contacting the IT team.

Question 2:
Use Bootstrap to create an accessible carrousel of three images. Submit the bootstrap_studentName.html and images folder
- Follow the introduction get started steps to create bootstrap_studentName.html
- Follow the carousel documentation to add a carousel - indicator
- Ensure HTML semantic is accessible

- Test the carrousel with Axe and screen reader
- Submit the bootstrap.html and images folder