Final Project: Single-Page APP (SPA)

In this project, you will use the accessibility knowledge you learned through the course along with your HTML, JavaScript, and CSS skills to build an accessible Single-Page App (SPA) website for a new company called “Empower Ability Labs”.

# Project Submission

On Brightspace, each team upload **ONE** PowerPoint presentation file and include the following:

* In the title slide:
  + Team members names and student numbers
  + Project URLs on GitHub:
    - The **SPA** published page
    - The repository
* Max of 6 additional slides to be used in the presentation

# Instructions

You are required to build the **SPA** websiteconforming with [WCAG 2.1 AA](https://www.w3.org/WAI/WCAG21/quickref/) and [ARIA Authoring Practices Guide (APG)](https://www.w3.org/WAI/ARIA/apg/). You deliver the project and present it.

* Upload the project on GitHub (other forms of submission for the code will result in a score of zero)
* The mock-ups are provided in [Appendix A](#_Appendix_A_–)
* The project specifications are outlined in [Appendix B](#_Appendix_A_–).
* For the styling and layout presentation
  + Use EmpowerAbilityLab.html Bootstrap template as a baseline.
  + Use the images in the images folder
* For the interactive components and web form
  + DO NOT put the Bootstrap JavaScript in the code i.e., https://cdn.jsdelivr.net/npm/bootstrap@5.3.1/dist/js/bootstrap.bundle.min.js
  + Follow the [ARIA authoring practices](https://www.w3.org/WAI/ARIA/apg/) for building your own components and put your code in EmpowerAbilityLab.JS.
  + If you need a place to start, simply search for the component in [bootstrap documentation](https://getbootstrap.com/docs/5.3/getting-started/introduction/)
* For any custom stylesheets, add it in EmpowerAbilityLab.CSS
* Provide proper references in the code
* Test with screen reader to ensure proper announcements
* Test with the keyboard only
* Plagiarism will result in a score of zero.

# Requirements (150points)

You project will be marked on the following requirements. Check Brightspace for the rubric and total points.

**1- Single-Page App(30 pts)**

* Focus management to automatically shift to the most relevant section.
* Unique page titles.
* Browser Back button in sync with browsing history.

**2- Layout design (15 pts)**

* Responsive design.
* User-Friendly design and color contrasts. (5 pts).

**3- HTML semantics (20 pts)**

* Page structure.
* Content and headings.

**4- Interactive components (35 pts)**

* Navigation bar. (5pts)
* Lightbox/Modal.
* Switch.
* Show/Hide (form - Tell us about your event).

**5- Web form (30 pts)**

* Web form keyboard accessibility and semantics.
* Web form error validation for required and type of fields.
* Web form user notification (thank you and errors).

**6- Slides (5 pts)**

* Maximum of 6 slides with a unique title for each slide.

**7-Group Presentation (15 pts)**

* Max of 8 min
* Navigate through the GitHub repository structure and published SPA website
* Walkthrough all requirements (1 to 5) and emphasize the steps taken to guarantee that the project meets adheres to WCAG 2.1 AA.
* Explain the challenges you encountered and how you overcame them

# Appendix A – Mock-ups

Your project should look something like this.

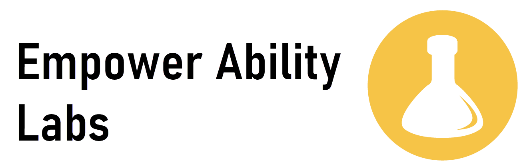
Mockups of the SPA sections


# Appendix B – Project Specifications

Notes on interactive elements are marked with “*Instruction”, yellow highlight and italic styling*.

## 1.Template

### 1.1. Header

**Logo**   


**Horizontal main navigation**

* [Home](#_4.3_Home_content)
* [Services](#_4.4_Services_content)
* [Schedule a call](#_4.5_Schedule_a)

### 1.2. Footer

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## 2. Home content architecture

**Welcome to Empower Ability Labs!**

Empower Ability Labs is a hub for learning and empathy-building. We are on a mission to foster understanding and promote inclusive digital experiences for all. We offer a range of services designed to promote accessibility awareness, drive inclusivity, and enhance the user experience. And help you find answers on How do people with disabilities use technology and navigate the digital world? What tools do they employ?

Meet the Empower Community!   
*Instruction for “Meet the Empower Community!”:   
When activated, the* [*Lightbox/Modal content*](#_Lightbox/Modal_content) *appears*

|  |  |  |
| --- | --- | --- |
| **Our Approach** | **Services** | **Testimonials** |
| Empower Ability Labs utilizes a hands-on approach to raise awareness and promote empathy. Our immersive workshops and lab days provide participants with a unique opportunity to step into the shoes of individuals with disabilities and navigate the world from their perspective.  Learn more | Promote accessibility awareness and enhance the user experience.   * Empathy lab days and workshops * Go beyond WCAG compliance! * Inspirational speakers.   Learn more | Invite a speaker with disabilities to share their unique journey. This captivating addition to your upcoming event will offer insights that resonate, inspire, educate, and enrich your team’s understanding of inclusion.  Learn more |

*Instruction for Learn more links:*

* *Our approach >Learn more goes to* [*https://www.google.com/search/howsearchworks/our-approach/*](https://www.google.com/search/howsearchworks/our-approach/)
* *Services> Learn more goes to* [*https://www.elevenways.be/en/services*](https://www.elevenways.be/en/services)
* *Testimonials> Learn more goes to* [*https://dictionary.cambridge.org/us/dictionary/english/testimonial*](https://dictionary.cambridge.org/us/dictionary/english/testimonial)

### Lightbox/Modal content

**Community Steering Committee**

We get an aha! moments from product managers who try our services for the first time. We offered many lab days, workshops and offered usability testing services to many companies and organizations including:

* McGill University
* Walmart.ca
* Apple.ca
* Google.ca
* Government of Canada

Close button   
*Instruction for the close button:   
When activated, the lightbox/Modal disappears*

## 3. Services content architecture

Dedicated space or programs designed to cultivate empathy and understanding among individuals towards the challenges faced by people with disabilities in using technology and interacting with various environments.

### Empathy Lab days and workshops

The lab days and workshops typically provide hands-on experiences, simulations, and interactions with assistive technologies, tools, and scenarios that replicate the obstacles individuals with disabilities encounter daily.

### Inspirational speakers

Invite a speaker with disabilities to take share their unique journey. This captivating addition to your upcoming event will offer insights that resonate, inspire, educate, and enrich your team collective understanding of inclusion.

### Usability testing

Go beyond WCAG! Involve individuals with disabilities in usability testing to gather valuable insights for refining product strategy and identifying accessibility concerns at an early stage when solutions are more feasible and cost-effective. You have access to a diverse community of people with disabilities, who use various assistive technologies. With technical expertise ranging from novice to expert, our community can support your product lifecycle from user research, to design, to QA.

## 4. Schedule a call content architecture

At Empower Ability Labs, we are dedicated to cultivating empathy and driving positive change through immersive experiences. Fill out the form below and we’ll get back to you as soon as we can to schedule a call with our sales team!

Business Name:

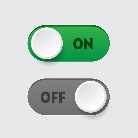
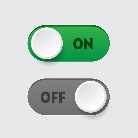
Phone number (613-123-1234):

Email: (required)

What would you like to talk about:

* Awareness lab days and workshops
* Invite a speaker with disabilities to your event
* Usability testing

Please tell us about your event   
*Instruction for “Please tell us about your event”:   
This interactive text area element appears only when “invite a speaker to your event” checkbox is selected)*

Receive emails about updates and services   
*Instruction on the icon :   
This is a switch interactive element. Choose an image* [*switch*](https://www.freepik.com/vectors/switch-button) *and use it.*

Schedule a call   
*Instruction for “Schedule a call” :   
This is a submit interactive element. Activating the Submit displays a thank you message or error messages.*