

1. When viewing the site from sitting far away of course I cannot see it unless I use my driving glasses.

Unfortunately, our site does not have any sounds, so screen-reading is off the table as well as auditory impairment issues and will not help you navigate through our website. I have tested the site using tabs and only tabbing through the headers works and it is barely discernible. Additionally, after filling in an input field you cannot tab to a button. This might require more customization into the tabindex order. This in turn means that without a mouse you cannot navigate through our site.

Viewing the site through a color-blindness simulator however will lead to results since most of our colors that we chose are still visible to people who are colorblind except for people who are mainly blind to blue hues. For people who are unable to distinguish red from green the only thing they may have an issue with would be when filling out the required fields the focused input border color is the same, however by adding popups this would minimize this issue and give more accessibility towards users who are **Deuteranopic** (cannot distinguish red from green). For people who have **Protanopia** (cannot distinguish red & green), it would be the same comments as I said for people who are **Deuteranopic**. The biggest problem on our site might be to people who have **Tritanopia** (cannot distinguish between blue & yellow), since our website schema uses blue however, we do not use yellow so it may not confuse people who are color blind to blue & yellow.

2. For W3C Easy Checks we mainly corrected the issues some of our group members experienced however some which have persisted are:
 - * Common Practice is to have headers start from the top most header but we do not use this header instead we directly go to header 2.
 - * When zooming in none of the sites assets are preserved instead it becomes a mess.
 - * Background is also not functional when screen size is reduced would suggest to enable adjustable browser size options in the html.
 - * Our input of type month however works in limited browsers and may not work as intended in select browsers.
 - * Our site has extraordinarily little contrast with our color schema mainly focusing on light colors and barely any distinguishing colors except for text usage. (White background does not help).
3. A user with physical impairment tries to access our site and wants to check their MetroCard balance however this user cannot use a mouse and after inputting their MetroCard number they are unable to proceed since tabs do not work when transitioning from a input field to a button.
4. We Corrected many issues including: empty title fields, missing meta encoding, missing image alt text, repeated ids, validating all code to run with mostly no issues. I mainly ran our site through W3C validation software and fixed these issues and as for repeated ids I changed those

to a class and gave some elements multiple classes. The only issue we have tried to fix but are unable to is the input type month, we tried to go around the browsers by using a polyfill but it didn't work when we implemented it so it was subsequently removed.

5. Changes I would make to the accessibility to our site would be:
 - * Add a tab index so tabbing would be an option to those with physical impairments
 - * Add sounds to the site to help those visually impaired like introduce screen reader support which would read whatever it is highlighted due to tabbing.
 - * Increases the font size inside input fields would also help a bit.

Gregory Ross Jr
Lab #8

Visual Impairment:

The website had very minimal assistance for those who were blind. Using the NVDA reader the information received about particular fields, pictures and elements didn't ensure ease of use and navigation

Color Blindness:

Viewed the site using Oracle Color. Elements seemed were distinguishable. Foreground elements against background elements seemed distinguishable. Only certain notifiers within the site weren't distinguishable. These were notifiers validating input as the colors green and red were used.

Visual Impairment but not full blindness:

Layout, most text, and buttons were distinguishable from 10 feet away. Text size on most elements had big and weighted enough text to read. The smaller text elements created a slightly more difficult experience when reading from that distance.

Auditory Impairment:

Not applicable as the site doesn't not contain auditory elements.

Physical Impairment:

Tabbing for the site works with all the inputs allowing the user to enter info for all input fields. The tabbing into buttons was not active and this would make it hard for users with physical impairments to navigate pages and submit their form information.

Suggestions:

Notifier of the required form fields

Limiting form input in regard to data type and
Adding alt text details
Making certain text slightly bigger

WAVE CHECK ERRORS

Several missing alt texts
Bad attributes for images
Form labels missing
Poor contrasting on link elements

Lab 8 – Accessibility Individual Work – Katie Solokhina

1. Using the NVDA reader, I realized how hard it is to navigate through our website if I was blind. A lot of the information was not read to me so I missed out on images, on a lot of the text that was on our site and a lot of the buttons that we are supposed to use to continue to add funds to the website. Also, when filling out any forms all I heard was that it was a field, and it wasn't specified what I needed to enter in each field. I am not sure if there was a way to make the NVDA reader read everything on the page but if there isn't then a user who is blind would unfortunately not be able to use our website until we make the proper changes.
2. Being color blind – I used a google chrome extension called colorblindness instead of Color Oracle because it wasn't allowing me to navigate through the site with the color vision impairment. The Google Chrome extension however works live and allows you to click on everything and navigate through the perspective of a colorblind person. It offers the following features: normal color vision, protanopia(red-blind), deuteranopia(green-blind), tritanopia(blue-blind), protanomaly(red-weak), deuteranomaly(green-weak), tritanomaly(blue-weak), achromatopsia(monochromacy), and blue cone monochromacy/achromatomaly. In normal color vision, our theme colors were mainly white and different shades of blue and our valid/invalid fields were highlighted green/red, respectively. When I looked with red-blindness, the site theme was white with different shades of purple, the invalid fields were a goldish-brownish color and the valid fields were similar but grayer. For green-blindness, all of it was similar except the site was a little darker in all aspects – themes and valid/invalid fields. With blue-blindness, the theme was white and different shades of a teal color, the invalid fields were red like normal but the valid fields were also a teal color. The weak color visions and the blue cone monochromacy weren't as strong so I was still able to tell what was valid/invalid. Lastly, the achromatopsia color vision strongly affected my ability because it made everything different shades of gray. So, protanopia, deuteranopia, tritanopia and achromatopsia color blindness hindered the use of the website since I wasn't able to tell whether the fields that required an input were valid or invalid.
3. I stood 5 feet away from my computer, since I have bad vision, at that point a lot of the words were already really blurry when I wasn't wearing my glasses.
4. Turning off my volume did not affect my experience since our website does not use any sounds.
5. I disabled my mousepad and I was able to navigate through the top menu bar using my tab and enter key, and was able to navigate to text fields to input numbers using the tab key as well. On the page that showed my MetroCard Balance I was only able to select check new card, I wasn't able to proceed to add funds. On the page where I add funds (I had to click on it in order to test it out), I was only able to navigate to the text field and wasn't allowed to navigate through the other price options, and was also unable to proceed to the next page. On the submit order page, I was easily able to navigate through the fields, tab to go forward and shift + tab to go backwards, however again I was unable to submit this page. Same thing with the support page – I was able to navigate through the dropdown menu using my arrow keys through the form with my tab key but was unable to submit the form.

Some of my suggestions for accessibility changes are:

- Change all of our buttons from regular links to actual buttons.
- Give all of our images an alternate text attributes.
- Give valid/invalid field feedback to the user by writing text not just but highlighting the field, because colors can't always be seen.
- Our font size is decently big as it is, but maybe we can make it bigger on hover so that people who are visually impaired can see it better.
- Allow users to click on links and buttons by using the enter key.
- Give all of our form inputs a label to describe what input is supposed to go into the text box.

According to WAVE technology I had the following errors:

Home Page:

- Missing alt text for the MetroCard image
- Missing or uninformative page title
- Document language missing
- Alert – missing first level heading

My Card Page:

- 4 Missing alt texts (on each content page for the MetroCard images)
- 12 Missing form labels
- Missing or uninformative page title
- Document language missing
- Alert – missing first level heading

Support Page

- 2 Missing form labels
- Missing or uninformative page title
- Document language missing
- Alert – No heading Structure

Corey Zoubkov
Group 3
Lab 8 – Accessibility Individual Work

1) Browse/interact with the website several times, each time using one of the following conditions, each simulating a different disability.

Using screen-reader software:

- No landmark region roles: <https://dequeuniversity.com/assets/html/jquery-summit/html5/slides/landmarks.html>
- “Add Funds” “Check New Card” read together, not clear which one you’re on
- Pressing down arrow from add funds amount doesn’t go to “Add” button
- Can’t tab from Exp Date to “Submit Order” button, leaving input mode and down arrow works

Color-blindness simulator:

Deuteranopia (Common): invalid (**red**) looks like a dark **gray/green**, valid (**green**) looks like a brighter yellow

- The colors are still discernable, but do not pop as much as the **red/green** color scheme.

Protanopia (Rare): invalid (**red**) looks like a dark **gray/black**, valid (**green**) looks like a brighter **yellow-green** (easier to see on the site contrasted against the light blue background)

- Similar to above. The colors are still discernable, but do not pop as much as the **red/green** color scheme, and pop less than above.

Tritanopia (Very Rare): invalid (**red**) displays correctly, valid (**green**) displays as **blue**

- Works just like the original color scheme, except valid css color changes. The **blue** still pops against the light blue background.

Summary: **valid/invalid fields can be distinguished, though not as clearly in most cases**

Sitting ten feet away from the monitor: (with 20/20 vision)

- “p2”, “th”, and “td” text may appear small. This can already be assuaged by zooming in the page without any resulting issues.
- Header bar links, “h2” text and buttons can still be seen clearly from afar.

With the volume turned off: (not applicable)

**The site does not provide any auditory feedback, nor asks users to listen for any information.

With the mouse removed from the computer, or disabling the touch pad in a laptop:

Home page:

- Can’t tab onto the “View My Card” button, but can tab onto the “My Card” link on the header which is equivalent.

My Card page, initial screen:

- MetroCard Number field does not tab to “View My Card” button.

My Card page, MetroCard balance summary screen:

- Can’t Tab onto “Add Funds” or “Check New Card” buttons on the MetroCard balance summary screen.

My Card page, Add Funds screen:

- Can Tab into the custom amount field on the Add Funds screen, but not onto the preset button choices. A keyboard-only user can still enter their desired amount in this field.
- Can’t Tab from that field onto the “Add” button to proceed to billing info.

Billing Information screen:

- Can tab from header links into the form, and then through all fields.
- Can’t tab onto “Submit Order” button.

Summary: **custom buttons cannot be tabbed onto**

2) Check your site using the W3C Easy Checks review (<https://www.w3.org/WAI/test-evaluate/preliminary/>). Make a list of any problems/changes recommended by the check.

- <title> field is empty
- Images do not have alt-text
- Headings start from h2 instead of h1
- Poor contrast (according to IE WAT)
 - #FFFFFF on #ffffff, although this seems like a code error or IE WAT error, rather than a visual problem. No white text lies on a white background.
- Text-only zoom:
 - All text gets larger
 - My Card page, Add Funds screen: chosen dollar amount and “Add” button are side by side, and upon extreme zoom the amount goes under the bottom (content overlap).
 - Support page: Bottom of content gets cropped, css height mistake
- **Keyboard access and visual focus: tested already, problems noted
- Labels checks:
 - No ‘label’ markup
 - ‘for’ markup only on custom add funds amount field
 - Custom add fund amount has unclear id (input1)
 - Many <p> tags with repeated id “p2”