

## **Project for the Public Good**

### **CISC 3650 - Group 3**

#### **Team Members:**

**Michael Levinson**

**Gregory Ross**

**Katie Solokhina**

**Corey Zoubkov**

#### **Lab 4 - Need finding**

1. Core Demographic - anyone who uses public transportation for travel and buys MetroCards in New York.
2. Three types of individuals in our core demographic are: technological savvy people, people who take buses, and people who travel via MetroCards rarely.
3. We will be conducting an online survey as well as a physical survey and send it out to people we know and come up to people in Brooklyn College to ask them to participate in a survey

We will be asking the following questions:

- a. What is your gender?
  - b. What is your age?
  - c. Do you take the train, bus, both or neither?
  - d. How often do you use public transportation?
  - e. Do you like the MetroCard system? Explain
  - f. What changes (if any) would improve the MetroCard system? (Not including price)
4. Majority of our participants responded that they do not like the MetroCard system. Some responses were that the MetroCard refilling system is inconvenient, that it is a difficult process to recover the money that you had on the MetroCard and that the paper transfer (that you receive from paying in coins on buses) only works to transfer to another bus and not another train - so when you don't live near a train you have to pay twice just to transfer from a bus to a train. Majority of the responses for improvements were to go digital by refilling the MetroCard online or on an app.
  5. While some of the reasons for not liking the MetroCard system are valid, we can only solve some of the problems with our own technology. We plan to make a website that allows you to check and refill your MetroCard balance by entering the number that is on the back of the MetroCard.

Our project is considered as a project for the public good because a lot of people have issues adding money to their MetroCards on a daily basis, whether it's because of the machines or because they live far away from a train station where they can refill their

MetroCard. Our website, if it was an actual fully functional site, would help a lot of people save time, and the hassle of refilling a MetroCard. Not only can people add funds, they can check how much money their MetroCards have, to ensure that they never not have enough money on there to get somewhere.

## **Lab 5 - Personas and Scenarios**

Persona 1 - Steve Swipe is a Brooklyn College freshman who loses his MetroCard all the time. Steve tends just throw his MetroCard anywhere in his pocket or bag whenever he is done using it. He loses a MetroCard almost at least once a month.

Persona 2 - Jerry Jumble - Brooklyn College teacher assistant mobile banker, who wonders why he cannot check his MetroCard balance on his phone. He is someone who loves technology and wonders why MTA hasn't yet implemented an app that allows people to check their balance on their phone. It would make things much easier for not only Jerry but for other New Yorkers as well.

Persona 3 - Max Metro - mid 30s educator who is always late because refilling his MetroCard always takes too long and the machines by his house are always broken. Max is someone who cannot ever seem to be on time. Max seems to always forget how much his balance actually is on his card and because he is always late he has no time to check it. It doesn't help that the machines by his house are always broken and there's no workers there to insert money. He can only hope there is a website that he can refill or check his balance.

All 3 personas are running late to the same class (teacher, teacher assistant and student). The teacher tells his class that he does not have a train station near his house and his MetroCard ran out of money, so he had to walk to the nearest train station to refill his MetroCard. The student was running late because he had lost his MetroCard and had to buy a new MetroCard, he only had coins with him but both machines at his train station wasn't accepting coins at the time due to some malfunction, so he had to go to the deli to exchange his coins for cash. The teacher assistant had mixed up his old MetroCard and new MetroCard and was not sure which one had money on it, so he had to check each MetroCard. One of the students in the class suggests using this new app that allows you to check your MetroCard balance and refill your MetroCard from anywhere - saving lots of time and preventing any problems that you could have with the MetroCard refilling stations.

## **Lab 6 and 7:**

### **3) Written Component: Website Design**

**1. Having conducted your needfinding and created personas and scenario(s), write a brief synopsis of what your website is intended to do. What problem will it solve, for which group of people? What are the demographics of that group? Why do you think this is an important project?**

Our website is intended to provide a way for NYC area commuters to manage their MetroCards online. New Yorkers are always in a rush as is and standing in line to add fares to our cards only makes us even more late. There is no specific demographic beyond that as everyone can benefit from having a way to view and add funds online. Upon conducting a survey, we found that most of the participants were not happy with the MetroCard system. In addition to the simple inconvenience of waiting in line, if you lose a MetroCard, any money that was on it is gone. Tracking funds online will provide an easier way to recover those funds.

**2. Include pictures of your wireframes (there must be at least 3, created in Balsamiq). Justify your final design choice: why did you make the design decisions that you did? You do not need to write an answer to every question asked in Section 1 but you must provide a detailed, well-reasoned justification. Some things to include: how did you decide on colors? Placement of items? User feedback? Directions?**

The buttons are consistently placed on the screen. The navbar provides navigation in a location that is familiar. All web sites have a home button on top, PDF readers have page forward/back buttons on a bar on top, etc. Buttons that take user to the next step of an operation are place in similar locations, if not the same one, as the page changes.

The MetroCard number that begins all operations is required as that is the main key that ties all operations together. The custom amount field on the Add Funds screen is not required as the user can choose from a preset list of options. All fields accept only alphanumeric text. Commas to separate, for example, a city from a state are not necessary as those fields are separate. Likewise, fields that accept names do not accept numeric input, and fields that accept numbers do not accept alphabetical input.

An image of a MetroCard is included to immediately signal what this application pertains to. When the user is prompted for a MetroCard number, an image of the back of the card indicating where to find that number is displayed instead. There is no mystery about what the application is asking for. The user is given clear feedback as to what is needed next.

**3. Read Chapter 7 in the reading assigned. Refer to the list of Schneiderman's Eight Golden Rules for interface design (covered in lecture 3; refer to the lecture slides as well). Choose four of them and explain how your website adheres to those guidelines.**

#### **1. Strive for Consistency**

- Identical terminology is used in menus (navbar buttons)

- Stylistic attributes are consistent across pages (colors, fonts, capitalization)
- Placement of images and forms is consistent

### **3. Offer Informative Feedback**

- Confirmation message when submitting billing information
- Error message when attempting to submit with invalid inputs
- Invalid form fields are highlighted

### **5. Prevent Errors**

- Inapplicable menu items are greyed out
- Form fields accept the appropriate type of input
- User is shown the format for relevant fields (e.g., credit card number)
- Valid form inputs are preserved

### **8. Reduce Short-Term Memory Load**

- Information is preserved between displays:
  - The MetroCard number, current balance, order type, and amount being added that the user entered is displayed up until the final form submission.
- Lengthy form doesn't span multiple displays (billing information)
- All fields of the form can be seen without scrolling (placed side-by-side)

**4. Section 7.1 in the reading refers to principles of interface design. There are three main categories: learnability, flexibility, robustness. Choose one principle from each category (e.g. for learnability, you can choose predictability, synthesizability, familiarity, generalizability, or consistency) and explain how your website adheres to that principle. You may have some overlap with your answer to the previous question.**

**1) Category: Learnability**

**Principle: Synthesizability**

***"Support for the user to assess the effect of past operations on the current states"***

The information the user entered for the transaction displays until the transaction is complete. The user knows exactly how much they will pay, the payment method, and into which MetroCard before they agree to doing so.

**2) Category: Flexibility**

**Principle: Substitutivity**

***"Allowing equivalent values of input and output to be arbitrarily substituted for each other"***

The user can select from a preset list of dollar amounts or fare counts to be added to their card. The same effect can be done with a box that lets users enter in a custom amount. The user can choose which method suits them best.

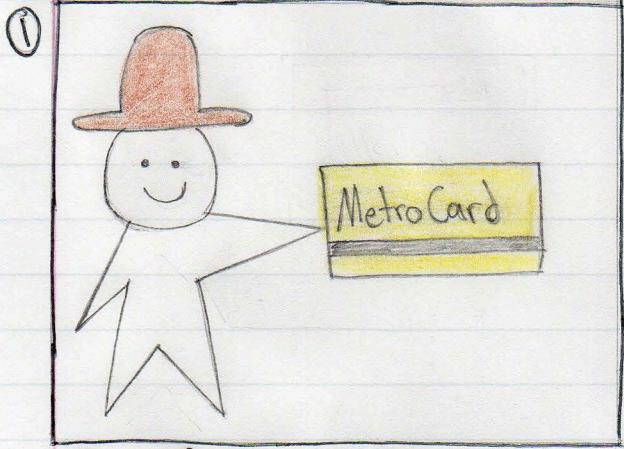
The user can check their MetroCard by clicking the “My Card” link on the header, clicking the “View My Card” button on the homepage, or by clicking “Check New Card” after already checking one. This allows for different workflows.

**3) Category: Robustness**

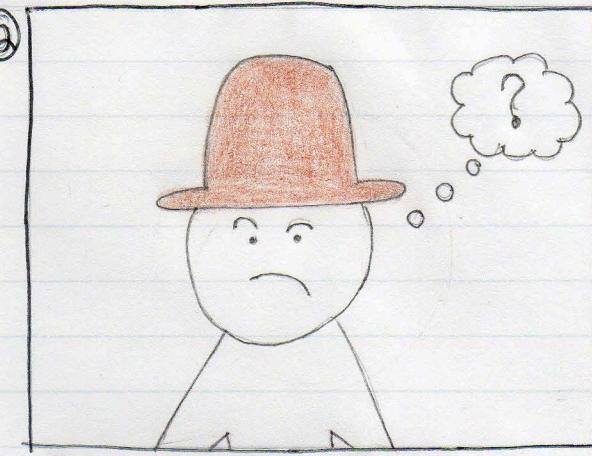
**Principle: Recoverability**

*“Ability of the user to take corrective action once an error has been recognized”*

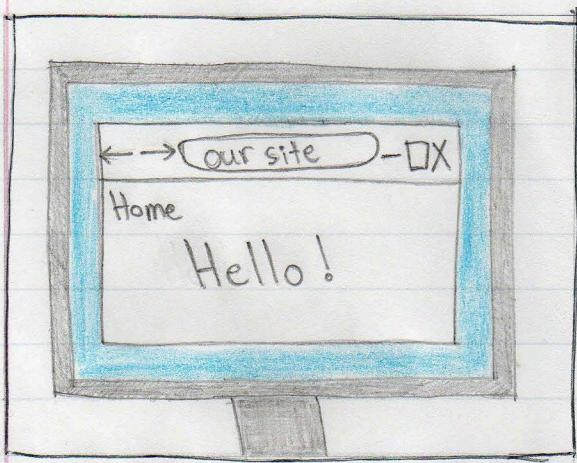
When the user submits the billing information form, they will be notified about any errors. Valid fields will remain and only those which need to be corrected will be highlighted.



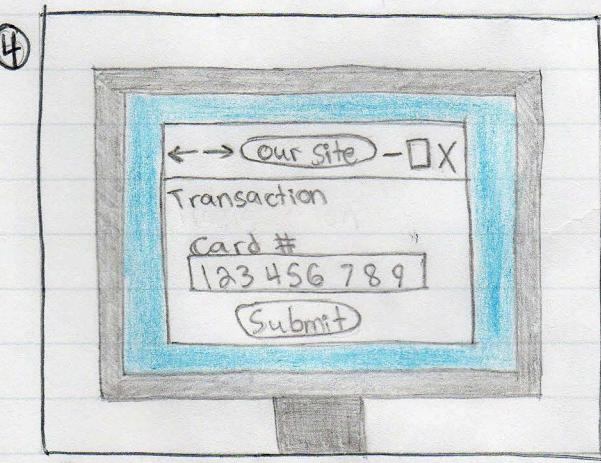
Tom finds an old  
MetroCard



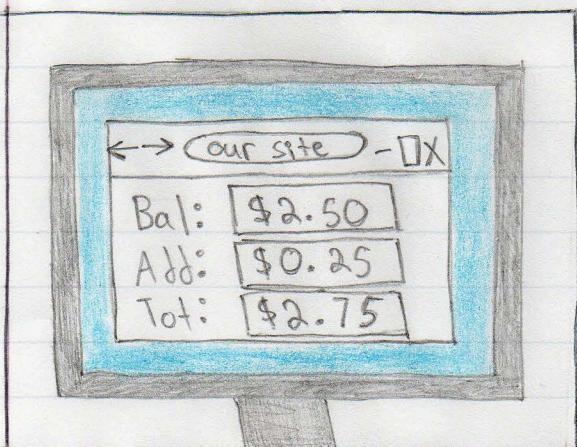
Tom wonders if the  
card is of any use



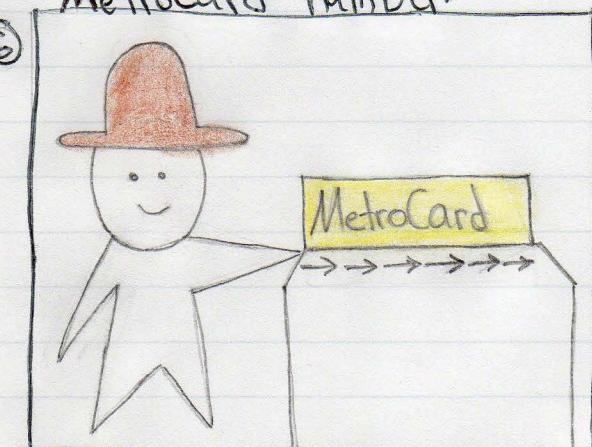
Tom logs onto our website



Tom goes to the transaction  
page and enters the  
MetroCard number.



Tom adds money to the  
card to make 1 ride



Tom goes to the station  
and enters without waiting



E-Card allows you to check your MetroCard balance online and avoid the hassle of waiting in line.

If you need to add funds, you can do that here too.

[View My Card](#)



# Enter your MetroCard number

Submit



Home My Card Support



# MetroCard #123456789

Balance: \$2.50

Add Funds



# MetroCard #123456789

Balance: \$2.50

## Add Funds

Amount: \$

Payment method:

BETA: We currently only process credit card payments

# MetroCard #123456789

Balance: \$2.50

Amount: \$0.25

Total: \$2.75

## Billing Information

First name

Last name

City

State/Province

Billing address

Country

Zip code

Credit card number

Submit



Contact for questions, comments, concerns, feedback

Name	Role
Michael Levinson	Developer
Gregory Ross	Developer
Katie Solokhina	Developer
Corey Zoubkov	Developer

Home My Card Support



E-Card allows you to check your MetroCard Balance online and avoid the hassle of waiting in line.

If you need to add funds, you can do that here too.

[View My Card](#)

[Home](#) [My Card](#) [Support](#)

Enter your MetroCard Number:

**Submit**

Home My Card Support



MetroCard #123456789

Balance: \$2.25  
1 Month Unlimited Expires 5/20/2020

Add Funds

Home My Card Support



MetroCard #123456789

Balance: \$2.25

---

Quick Add:

- 1 Ride
- 10 rides
- 1 Week Unlimited
- 1 Month Unlimited
- Other:

Total Price: \$

**Add Funds**



# MetroCard #123456789

Balance: \$2.25

1 Month Unlimited Metrocard

Amount: \$0.50

Expires 5/20/2020

Total: \$2.75

## Billing Information

First Name

Last Name

Billing Address

City

Country

Zip Code

State

Credit Card Number

Expiration Date:

CVC Code:

Add Funds



Contact for questions,  
comments, concerns, feedback

Name	Role	Email
Michael Levinson	Developer	michael@gmail.com
Gregory Ross	Developer	gregory@gmail.com
Katie Solokhina	Developer	katie@gmail.com
Corey Zoubkov	Developer	corey@gmail.com



Home My Card Support



# Welcome

E-Card allows you to check your MetroCard Balance online and avoid the hassle of waiting in line.

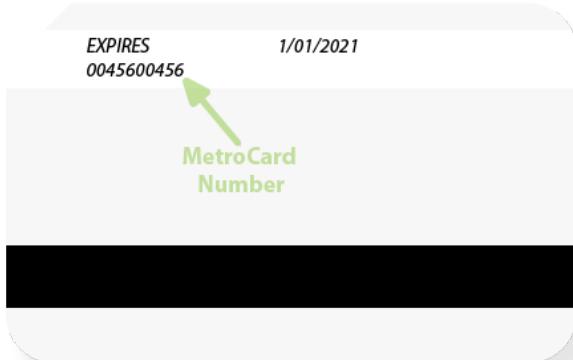
If you need to add funds, you can do that here too.

[View My Card ▾](#)

Home My Card Support



## Back of MetroCard:



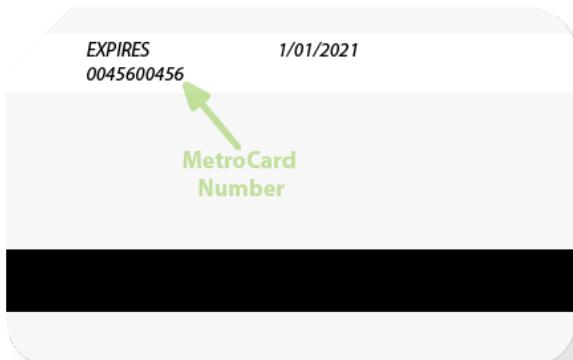
Enter your MetroCard Number

Submit

Home My Card Support



## Back of MetroCard:



Enter your MetroCard Number

You attempted to enter a non numeric value

Submit

Home My Card Support



MetroCard #123456789

Balance: \$2.25

30 Day Unlimited

Expires 5/09/2020

Add Funds

Check New Card



# MetroCard #123456789

Balance: \$2.25

---

Quick Add:

Unlimited Rides

Other:

A Web Page

Home My Card Support



## Order Summary

MetroCard #123456789  
Current Balance: \$2.25  
Order Type: Cash Amount  
Amount Added: \$10.00  
Final Balance: \$12.25  
Total Cost: \$10



## Billing Information

First Name  Last Name   
Billing Address   
City  Country   
Zip Code  State   
Credit Card Number   
Expiration Date:  CVC Code:

If your adding cash

A Web Page

Home My Card Support



## Order Summary

MetroCard #123456789  
Current Balance: \$2.25  
Order Type: 30 Day Unlimited  
Exp Date: 05/20/09  
Total Cost: \$100



## Billing Information

First Name  Last Name   
Billing Address   
City  Country   
Zip Code  State   
Credit Card Number   
Expiration Date:  CVC Code:

If your adding time

[Home](#) | [My Card](#) | [Support](#)

## Contact for questions, comments, concerns and feedback

Name	Role	Email
Michael Levinson	Developer	michael@gmail.com
Gregory Ross	Developer	gregory@gmail.com
Katie Solokhina	Developer	katie@gmail.com
Corey Zoubkov	Developer	corey@gmail.com

Reason for Contacting Support

Submit

## **Lab 8 – Persona, Scenario and Accessibility Code Changes**

### **Persona #4**

Alyssa is a student with dyslexia. She has trouble reading and though she isn't blind the use of braille and text to speech on the MTA's physical machine makes for a seamless experience when checking and adding funds her MetroCard. She also takes advantage of NVDA readers to navigate through and utilize features of websites.

### **Scenario:**

Using the site was not the most fluid experience for Alyssa. She had trouble reading the text on the home page. But seeing a bright blue button she decided to click it. When she came across the page to enter her MetroCard number the task proved to be difficult. She couldn't understand the instructions on the website that told her the location of her MetroCard number. Just to see how the site would operate she entered a random MetroCard number. She saw but could not understand text regarding information on the card. She also saw buttons in which she struggled to understand their purpose. She immediately just closed the website and headed to her nearest subway station.

### **Accessibility code changes**

#### **Home.html**

- Line 3 – added html language
- Line 7 – added detailed title
- Line 24 – added alt image description
- Line 36 – changed link to button

#### **MyCard.html**

- Line 3 – added html language
- Line 7 – added detailed title
- Line 26 – added alt image description
- Line 30 – added label for MetroCard number & specified that it is 10 digits
- Line 33 – added pop up message to fill out the field
- Line 35 – changed link to button
- Line 42 – added alt image description
- Line 52-53 – changed 2 links to buttons
- Line 60 – added alt image description
- Line 69-72 – changed 4 links to buttons
- Line 74-75 – changed 2 links to buttons
- Line 77 – added label for other amount
- Line 83 – changed link to button
- Line 103 – added alt image description
- Line 114 – added label for first name & required asterisk
- Line 115 – added label for last name & required asterisk

- Line 124 – added label for city & required asterisk
- Line 125 – added label for state & required asterisk
- Line 136 – added label for address & required asterisk
- Line 144 – added label for country & required asterisk
- Line 145 – added label for zip code & required asterisk
- Line 156 – added label for credit card number & required asterisk
- Line 179 – added label for CVV number & required asterisk
- Line 180 – added label for Expiration Date & required asterisk
- Line 190 – changed link to button

#### Support.html

- Line 3 – added html language
- Line 6 – added detailed title
- Line 59 – added label for dropdown selection
- Line 66 – added label for support textarea
- Line 67 – added pop up message to fill out the field
- Line 68 – changed link to button

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

## Michael Levinson – Lab 8 Individual Accessibility Review

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 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), deutanopia(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, deutanopia, 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:**

Deutanopia (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”

## **Lab 9: Steve Krug Evaluation**

### **Questions:**

1. What is E-Card?
2. For how many days is MetroCard#1234567890 unlimited?
3. When does MetroCard #1234567890 expire?
4. How much money is on MetroCard #1234567890?
5. How much do 10 rides cost?
6. How much is a 30 Day Unlimited MetroCard?
7. Add \$20 to MetroCard #1234567890, what is the order type?
8. What is the Final Balance of MetroCard #1234567890?
9. What if you changed your mind, and you want to add 10\$ to the same MetroCard, what should you do?
10. Fill out the billing form and submit it, did you have any issues?
11. What can you contact support about?
12. Who are the developers of E-Card?

## Michael Levinson – Lab 9 Usability Review (Steve-Krug Style Evaluation)

### Questions:

**1. What role does Michael Levinson have on this website?**

Answer: Developer

Had Issues:  No Issues:

Struggled to find the Support page which had my name on it

**2. On the page which has the 2<sup>nd</sup> “View My Card” button what is the MetroCard number of the image on the left of it (green pointer)?**

Answer: 1234567898

Had Issues:  No Issues:

Text was a bit too small to read

**3. What balance does your MetroCard have?**

Answer: 10.50

Had Issues:  No Issues:

**4. How much do you need to pay when you click on the “1 Ride” button?**

Answer: 2.75

Had Issues:  No Issues:

**5. What is your “Order Type”?**

Answer:

Had Issues:  No Issues:

**6. Upon filling out the Billing Information form were there any issues or none at all?**

Answer: No

Had Issues:  No Issues:

Confused the user because after clicking submit a success alert popped up but the popup field for name said to fill out the field.

**7. What type of support does the website offer?**

Answer: Navigation

Had Issues:  No Issues:

Could not differentiate the drop-down menu on Support (Also the same on the expiration date tab).

**8. What card does this site feature?**

Answer: MetroCard

Had Issues:  No Issues:

**9. Does the MetroCard number match the one you have entered on the MetroCard information tab?**

Answer: Yes

Had Issues:  No Issues:

**Michael Levinson – Lab 9 Usability Review (Steve-Krug Style Evaluation)**

**10. What is the default MetroCard Expiration Date on your card?**

Answer: 5/10/2020

Had Issues:  No Issues:

Note: My mom tested it and she is more visually impaired than me.

## **Gregory Ross**

### **Lab 9: Steve Krug Evaluation**

#### **Questions:**

##### **1. What is E-Card?**

User understood the purpose of an E-card and the goal of the site regarding MetroCard as it was the first thing she saw on the home page.

##### **2. For how many days is MetroCard#1234567890 unlimited?**

User immediately noticed days in which the card was unlimited. Stated 7 days.

##### **3. When does MetroCard #1234567890 expire?**

User could accurately tell the card expiration date.

##### **4. How much money is on MetroCard #1234567890?**

User could accurately tell the card balance and stated \$10.50.

##### **5. How much do 10 rides cost?**

User did not recognize how much 10 rides would cost until they understood selecting one of the price buttons would display the price.

##### **6. How much is a 30 Day Unlimited MetroCard?**

The user gave the correct price of \$127.00 for a 30 day unlimited.

##### **7. Add \$20 to MetroCard #1234567890, what is the order type?**

The user correctly identified the order type as Cash Amount.

##### **8. What is the Final Balance of MetroCard #1234567890?**

The user read the label "Final Balance" and the amount of \$30.50.

##### **9. What if you changed your mind, and you want to add 10\$ to the same MetroCard, what should you do?**

The user suggested reentering the MetroCard info by pressing the My Card tab because the site lacked a back button.

**10. Fill out the billing form and submit it, did you have any issues?**

The user understood what was required of each of the billing inputs.

**11. What can you contact support about?**

The user identified the input box and its label. They then accurately stated feedback and questions as the things you can contact support about.

**12. Who are the developers of E-Card?**

The user didn't understand the purpose of the developers and contact info and asked if a the input from the support page would go to a particular developer. Also asked which one would be suggested to contact.

The user seemed to navigate the site with ease and understood the information the site was providing. I believe this was due to the sites clarity and the users familiarity with certain with certain elements such a billing form fields. The user felt the site was slightly repetitive and inconvenient due to the need of them repeating a process that could've been handled with a button. User also seemed to find the developer info unnecessary for users who want to just submit support request.

## **Lab 9: Steve Krug Evaluation – Individual Write Up by Katie Solokhina**

### **Questions:**

#### **1. What is E-Card?**

User suggested an about us page to explain what e-card is because that is where she expected it to be but then read the home page and found a brief explanation there, that it allows you to check your MetroCard balance and add funds to your MetroCard.

#### **2. For how many days is MetroCard#1234567890 unlimited?**

User did not have a problem navigating to the “My Card” page and inputting the number and finding the answer to be 7 days.

#### **3. When does MetroCard #1234567890 expire?**

May 10, 2020 - user did not have problem finding this answer.

#### **4. How much money is on MetroCard #1234567890?**

\$10.50 - user did not have problem finding this answer.

#### **5. How much do 10 rides cost?**

User suggested to add a monetary value to the options that don't claim how much they cost until they are actually clicked, with an actual MetroCard refiller machine those options don't usually exist so it was a little confusing but she said it was \$27.50.

#### **6. How much is a 30 Day Unlimited MetroCard?**

User did not have an issue telling me how much it costs - \$127.00.

#### **7. Add \$20 to MetroCard #1234567890, what is the order type?**

User pressed add button to move onto the billing page, where they easily found the order type to be cash amount.

#### **8. What is the Final Balance of MetroCard #1234567890?**

User did not have an issue finding the final balance - \$30.50

#### **9. What if you changed your mind, and you want to add 30-Day Unlimited to the same MetroCard, what should you do?**

User said she has to start over by pressing the My Card menu option, however, it would have been easier if there was a back button so that she doesn't have to completely start over.

#### **10. Fill out the billing form and submit it.**

User did not have a problem filling it out. She said that she liked the feedback that her form went through, and that when filling out the numbers it prevented user error by having the input type length for specific fields.

#### **11. What can you contact support about?**

User did not have an issue navigating to the support page, and finding the two options - feedback and questions - that she could contact support about.

## **12. Who are the developers of E-Card?**

User did not have problem finding the developers - Michael, Gregory, Katie and Corey - but asked if she could contact just one specific developer versus all of them.

Overall the user didn't have too many issues navigating through the website, since a lot was self-explanatory. However, there were certain things that the user noticed or had difficulty with finding (such as the about us page or certain prices of options that weren't specified) because she had a fresh perspective on the website, as opposed to us who created the website so we thought these things just made sense. She also found it very tedious having to restart the whole process when she already continued to the billing page and decided to change the MetroCard type or amount. This feedback was very helpful in improving our website usability.

Corey Zoubkov  
Group 3  
Lab 9 – Steve Krug Evaluation

## Questions:

### 1. What is E-Card?

Answer: *E-Card is a service that allows you to check on your MetroCard balance online and avoid the hassle of waiting in line.*

The user had no issues completing the task.

### 2. For how many days is MetroCard#1234567890 unlimited?

Answer: *7 Day Unlimited*

The user had no issues completing the task.

### 3. When does MetroCard #1234567890 expire?

Answer: *Expires 5/1/2020*

The user had no issues completing the task.

### 4. How much money is on MetroCard #1234567890?

Answer: *\$10.50 is on the card*

The user had no issues completing the task.

### 5. How much do 10 rides cost?

Answer: *10 rides are \$27.50*

The user had no issues completing the task.

**6. How much is a 30-Day Unlimited MetroCard?**

Answer: *30 Day Unlimited card is \$127*

The user had no issues completing the task.

**7. Add \$20 to MetroCard #1234567890, what is the order type?**

Answer: *Order type is cash amount*

The user had no issues completing the task.

**8. What is the Final Balance of MetroCard #1234567890?**

Answer: *Final balance is \$30.50*

The user had no issues completing the task

**9. What if you changed your mind, and you want to add \$10 to the same MetroCard, what should you do?**

Answer: *Click on “My Card” and go through adding funds again*

The user was able to complete the task, but complained that he would have preferred to be able to go to the previous screen rather than restarting, even if the hassle was minimal.

**10. Fill out the billing form and submit it, did you have any issues?**

Answer: *No issues, pop-up says success*

The user had no issues completing the task

**11. What can you contact support about?**

Answer: *Feedback and Questions*

The user had no issues completing the task.

## **12. Who are the developers of E-Card?**

Answer: *Michael Levinson, Gregory Ross, Katie Solokhina, Corey Zoubkov*

The user had no issues completing the task.

Overall, the user was pleased with the experience. He remarked that the site layout was clear and that it works smoothly. His only complaint was that it would be better if he could go back a step in the transaction process instead of having to start over. That would make it easier to undo errors and would give the user more flexibility. From this exercise, I discovered that usability issues are not always apparent, and that it's very unlikely to catch them all. Even though my test partner did not feel inconvenienced, he thought it was odd that this functionality was forgotten, and suggested it may be an obstacle for most users.