happy haven

Boutique

CS 300
Vianey Palacios
Paulina Morales
Final Project Report
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Happy Haven Boutique was created by NEIU students Vianey Palacios and Paulina Morales. Vianey is a current NEIU senior majoring in Computer Science with a concentration in Information Technology. Vianey will be graduating this Sunday and has a job offer pending graduation. Vianey was a Computer Science peer leader for the Programming I and II classes this semester. Vianey also works part time as a sales associate at Kate Spade selling women's apparel and accessories. During her free time, Vianey likes to spend time with her dog Lucas, watch movies, and catch up with her friends. Paulina is a student at NEIU majoring in Computer Science and minoring in Psychology. Paulina is a human computer interaction TA and a research intern developing a research based e-Health self management tool for cancer survivors with disabilities. In the past, Paulina has volunteered and been part of women's empowerment clubs.

For this web development project, we have created an e-commerce website for a women's STEM boutique. As women in computer science, we feel it is important to elevate and empower the voices of women in STEM. Much of the disparity in STEM starts in the formative years of our lives. At a young age, girls are discouraged implicitly from becoming interested in STEM fields. We would like to see women of all ages, backgrounds, and experiences go into the STEM field if they desire to. From personal experience we have both noticed that our classes are heavily male dominated. According to AAUW, women make up only 28% of the workforce in STEM and only 19% of computer science majors are women. Some of the reasons for the gender STEM gap is due to gender stereotypes, male-dominated cultures, and having few role models in the STEM field.

Our aim is to diversify STEM by making higher education more accessible for women of all walks of life. Women, especially younger girls, should be empowered and encouraged to explore, learn, and question their classes, education, and career opportunities in STEM. Diversifying STEM is a cause we

should all be working toward, as the lack of diversity impacts our daily life. For example, during the training of early voice recognition software, a team of engineers forgot to train the software's algorithm to include a sample of women's voices. Therefore, their software was unable to detect the voices of women and they had to re-train the algorithms. Another example of lack of diversity was when the first designs of airbags had been made and were only tested by men which resulted in more severe injuries for women and children (Churchill, 56). Due to the negative impact that the lack of diversity in the STEM field poses to our society, we decided to create Happy Haven, an online boutique that not only raises awareness about this issue, but also addresses it in a feasible manner. Happy Haven sells women's products such as apparel, jewelry, and stationery that are all STEM themed to empower and help support women in STEM. Half of all the proceeds from our sales will go towards a STEM women's scholarship fund or an organization that promotes, encourages, and increases awareness of women in STEM. There is also an option if the user would only like to provide financial aid for women in STEM, there is no need to purchase. Donations can also be made to the STEM women's scholarship and organizations on our website.

We created Happy Haven's interface using HTML, CSS, and Javascript. Below is a flow chart of our website layout. Every page is linked and accessible no matter what page the user is on. Our Happy Haven logo is found at the top left hand corner of the homepage. The Happy Haven logo is clickable and will direct user's back to the homepage. The logo is on the same line as our navigation bar. On the navigation bar, there are links to our apparel, jewelry, and stationary pages. Next to the stationary link on the navigation bar, there is a "Donate Today" button that will take the user over to the donations page where they can donate without purchasing any items. Finally, the last link on our navigation bar is the cart page which is accessible by clicking on the shopping cart picture. The navigation bar is found on all of our pages throughout the website.

Project Design
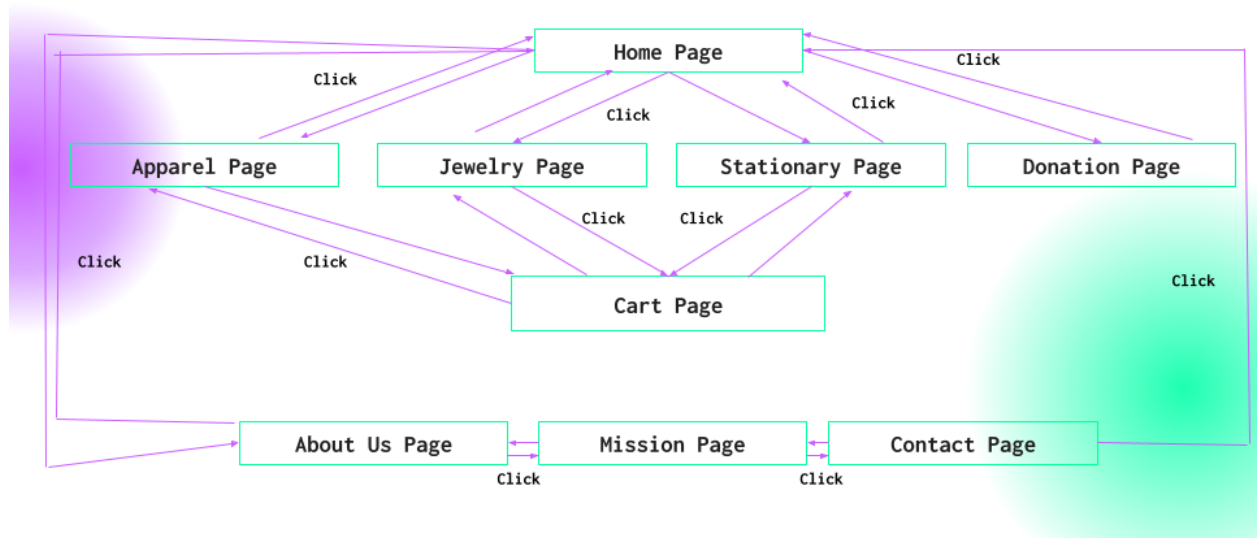
The first image that greets the user on our homepage is a WOC (woman of color) scientist in a lab. This photo was chosen specifically to showcase that not only white women belong in STEM, but also women of color. Below the user will find our latest arrival items, these items are linked to their respective page. If the latest arrival is a top, then once the user clicks on it, they will be led to the apparel page. The layout of the apparel, jewelry, and stationary pages are all very similar. All the pages feature an image of the product, with the name of the product below the image, and a price listed. All the products have an "Add to Cart" button that will allow the user to add items that they would like to purchase, into the cart. If the user would like to add multiple quantities of the same item, the user needs to click the "Add to Cart" button the amount of times corresponding to the amount of quantities desired. The cart icon on the navigation bar will be updated with the number of items in the cart. The user can click on the cart icon to view their cart.

The cart page displays all the items that the user has added to their cart. The first column shows an image of the item that they added to the cart. Next to the image is the name of the item, the price, the quantity that they would like of that item, and the total. The total calculates the quantity times the price of the item. Each row in the cart has a remove button that will remove the item from the cart. The subtotal at the bottom of the cart page, sums up all the item totals and will update as items are added or removed from the cart.

Finally, when the user scrolls to the bottom of each page, they will find our footer. In the footer, the user will find an 'About Us', 'Mission', and 'Contact' Page. The 'About Us' page introduces the user to our team. As previously stated, Happy Haven was created to raise awareness, therefore in our 'Mission' page, we introduce a short and informative video on the experiences of women in a STEM field, computer science. We want to be easily accessible to our target audience, which is why we added the 'Contact' page.

During the process of designing Happy Haven's webpage, our team ran into hurdles. At the beginning of the process, we were unsure of how the website's layout should look. So we had to look for design inspiration from other online women's boutiques from which we noticed many similarities across boutiques. The navigation bars were always at the top, below the navigation bar there was usually a banner which informed the user of current sales. The banner was always a different color than the typical white background, which gave the sites a more friendly, colorful, and professional appearance. From the layout of other online boutiques, we noticed that they had a main picture in their landing page, and then displayed either their new arrivals or best selling items. And finally at the bottom they had a footer that gave the user the ability to contact them and learn more about the boutique.

Another hurdle we encountered was the creation of the running total calculator. Our team looked to their previous experience with programming in order to get a better understanding of how to create the calculator. However, to

no avail, we looked at various online resources on how to make a calculator. These resources aided Vianey in the creation of the cart page.

　　With more time, knowledge, and experience, we have some ideas on what we would change or improve on the future work of this project. We would partner with different organizations that support/empower women in STEM. With a little more knowledge in Javascript, we would make our e-commerce site more interactive and user friendly by adding Javascript to the forms in the donations and contact us pages. Another improvement that could be made in the future is adding a check-out or purchase page where the user can input their payment information and receive a confirmation that their purchase was successful. Finally, more product images would be added so the user could have more views of the product. But with the time that we did have left, we made minor aesthetic fixes. For example, certain elements were unaligned, and we worked on aligning them in order to make the website look more professional.

　　We both learned a lot in this course and in doing this project. Vianey and Paulina had no prior experience with web development so learning new languages such as HTML, CSS, and Javascript were very exciting to them. We enjoyed being able to be so creative with coding and being able to build and design web pages while thinking outside of the box. During this project, Vianey and Paulina worked on their teamwork skills and realized that patience, flexibility, and communication is needed in order for a team to be successful. We also enjoyed creating a website based on something we are passionate about. In the near future, we both hope to see more diversity, not only in computer science, but in the STEM field in general.

References

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