Shoe Comparator

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Github Link:

https://github.com/bradygrundy/INST377 Shoe Project

Server URL:

VCL Account = Lab Machine: INST377--kgibbon1--Instructor:dheidenb
USE FIREFOX TO VIEW OUR WEBSITE

Information Problem:

The information problem we are trying to solve with our project is the lack of comparable pricing information on shopping websites. We found this information problem by brainstorming our recent endeavors online and what each team member's experience was. A commonality between all of the group members was that as much as we like to online shop because it is easier and convenient, we always waste time going back and forth between websites to find a cheaper price. As a result, we chose to tackle this information problem in the hopes of attempting to resolve it. We will be working towards constructing a web application that compares the prices of particular footwear products across different e-commerce websites. Our portal will enable the user to compare the price of one product across some of the biggest online shopping websites. Our stakeholders would primarily be the general public. More specifically, stakeholders would include online shoppers, parents and college students on a budget, athletes, and business professionals. Our proposed solution would allow our users to be able to view the cheapest options at one glance, and view/click the website that offers the product they are looking for at the price they want. This will allow for ease of use, enhance convenience, and save our users money. An ideal scenario that would occur with the use of our system would be a user who is trying to find a pair of Nike sneakers, but is on a budget between \$50-\$70. Instead of searching

numerous websites to see if they are getting the cheapest option, the user would use our database to look up the product, see the listings from different sites, be able to filter based upon their size, color, model, and price range, and the results unique to the user's needs would pop up. This saves the user time and resources, and they will be happier knowing they found their cheapest option.

Strategies/Solutions:

For solving our problem we first decided that we needed to create a database to put all of our shoe data into. This database would include all of the links, prices, sizes, colors, descriptions, and images for each shoe. The database for this project was created using mysql since we were all familiar with that platform from INST 327 and we already had it installed on all of our machines. What we wanted to do with our different pages is initially create two HTML pages for our site, one as the main landing page and one as the results page for when a user clicks on a shoe. This shoe page would be created dynamically, calling the SQL database for all of the information of each shoe. After working on our results HTML page we found out that it would be much easier to dynamically create our results page using PHP instead of HTML. This PHP was created using a secret form within our HTML doc that assigned the shoe id on click of each shoe's image or title. This secret form posted the shoe id into the PHP file with the name s1 as an example of shoe 1. In the PHP file we stripped the s off of each variable, then used that as the shoe ID to directly query the database for the respective shoe. For our website's design, we styled everything using CSS in two different ways. For our HTML page we used an external style sheet since it was the most convenient way to style our page. On the other hand for our PHP page we actually wrote our CSS within the PHP file to make it easier for us.

Rationale:

We chose to use sql because of our prior knowledge of this software from INST327.

Originally, we were using a file with several shoes that we found online, but chose to build our own database and manually input data because this made sense with the scope of the project and the amount of time we had to complete our task. We chose to use php because following

assignment 2 we felt more confident about building a form and using this to generate results. Github was used often because the five of us were editing the same file at the same time. For example, while one of us was building the php file, another one of us was styling that file, and so we needed a way to successfully merge our changes once we were both finished, and github was the best way to do this. AMPSS was used because we needed a way to test our website on a local server before we got a chance to set up the VCL.

Successes:

Our team was able to create a dynamic website where we were able to pull query results and generate a page with what the user was looking for. The page included price for each website, and let the user know if it was not available at certain websites such as one shoe not being sold at foot locker. We were also able to successfully direct the user to the desired site, by attaching hyperlinks to each price, bringing the user to that specific external site's product page so that they can go ahead and make a purchase if they choose to. This takes our website a step further, by not only displaying results but prompting the user to make a decision, allowing them to take the next step. We were able to accomplish our goal of having at least five different shoes and five different websites for our final product. The challenging part of the project was figuring out how to dynamically call the shoes page from the database. We first got the SQL calls working in our php page my establishing a connection to our database, then moved on to the dynamic calling, while one of us structured these calls and wrapped them in HTML to make the website clear and easy to navigate. Working efficiently as a group, we solved our problem.

Challenges:

Our main challenge was that each group member had a different idea of how the website should look and what the website should/should not include. By the end, we came together and removed unnecessary or unfeasible aspects of the website such as the search bar and filtering options. We also ran into numerous problems within our database with regards to the display of size. The size kept appearing as a date, and it took numerous edits and pushes to the VCL in order for it to be successful. Being a group of five people, it was hard to find time each week to meet because of individuals work and school schedules. Groupme was useful but a better

platform for communication may be recommended for future projects. We also underestimated how long the entire project would take and felt rushed at the end. Since we were still debating how to layout the pages, it hindered us from starting sooner and we had to make a lot of quick decisions. The VCL also posed as a challenge because none of us had experience creating our own machines and connecting them to a website we were creating. Attending office hours was very helpful in learning how this aspect is crucial to creating a dynamic web application.

Future Work:

We hope in the future that the Shoe Comparator will have both more shoe options for male and female as well as a vast amount of different websites per shoe. This would involve either going in and manually adding shoes, or scraping websites for new styles. We would also like to be able to scrape and automatically update each of the shoe prices, because once we presented the project, the prices had changed and did not reflect our data in the database. The team would also like to improve upon the design of the site as a whole and enhance the visual appeal of the website. We also want to tailor more to user's needs and wants such as a search bar, filtering options (size, color, brand, price) and different pages for each individual brand of shoe.