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DTSC 3023.501 - TERM PROJECT

Group 2- Cart Comparison App

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Overview

Apply best price match discount on items in cart.

According to Nerd Wallet in a 2021 online article, "Price matching means a retailer will drop their prices to match a competitor's." So, if you have the time to find and use them, price matching policies can lead to significant savings. It involves showing proof (and a few other requirements) that you found the item at a lower price with one of their competitors. This can be done in store or online. When done online, digital coupons are usually used.

There are several places to find digital coupons. This includes adding a digital coupon extension to your browser. For example, Microsoft provides a built in feature through the Microsoft Edge shopping features. So, "while you shop online. Microsoft Edge searches the web and alerts you to lower prices on other sites". In addition, Stores website, Digital Newspapers, Digital Coupons apps, and Coupons sites are additional places to find digital coupons.

Overview Cont'd

Popular coupon rewards like Honey, require you to manually tap to apply codes at checkout.

Our App will automatically compare prices across various retail outlets and apply the lowest total price of items in your cart.

No need to go to another site to get a discount or manually tap to apply discount/coupon to each item in the cart.

Proposed Model

Application Name: PriceSmart

Tagline: Your one-stop app for smart savings on your shopping.

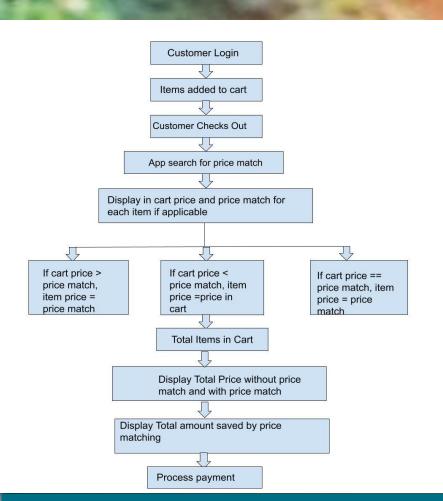
Target Users:

- Online shoppers who want to save money
- Consumers who are looking for the best deals on a variety of products
- Price-conscious consumers seeking the best deals on a wide range of products.
- Individuals seeking to optimize their spending habits and stretch their shopping dollars.





Process Flow





Implementation

The programming language for the App will be in Python. Python because it is flexible and scalable and has vast libraries which we can leverage on for data mining, manipulation and visualization. It will also be helpful when we start incorporating Machine Learning Algorithms.

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Program Simulation and Output

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Here are your new store totals:
Items in your cart:
Item
                   Nordstrom
                               Macv's
                                           JC Penny
Black t-shirt
                                           $10.00
                   $9.00
                               $12.00
Red sandals
                                           $14.00
                  $14.40
                              $19.00
Blue blouse
                $17.40
                              $24.00
                                          $19.00
                   $5.40
                               $0.00
                                           $3.00
Brown belt
New total cost from each store:
Nordstrom
           Macv's JC Penny
$46.20
           $55.00
                       $46.00
Counpon savings by store:
$30.80
           $7.00
                       $3.00
The store with the best deal after applying coupons is: JC Penny
You have potentially saved an additional $3.00 by appling coupons with PriceSmart.
```

Limitations

- Not all retailers participate in price match
- Only three types of coupons
- Data used in price matching isn't generated in real-time from the internet
- Only clothing retailers are used

Future Plans

- Web scraping techniques to pull realtime pricing information from participating retailers and other sites.
- Alert feature to show lower price for items marked for price monitoring.
- Incorporate machine learning algorithms to provide personalized product recommendations and enable price prediction capabilities.
- Allow user to substitute for items in their cart.

Conclusion

The aim of PriceSmart is to become the go-to app for online shoppers seeking to maximize savings. This will be achieved by using a detailed product database and real-time price comparison to deliver the best time and money saving deals to customers. Price Smart will empower users to make smart choices and stretch their shopping dollars further.

Citation

- NerdWallet (2021, November 1). Price Matching. Retrieved November 29, 2023, from <u>Price Matching: 6 Tips to Help You Save - NerdWallet</u> <u>Canada</u>
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- 3. Microsoft Edge(2023). Shopping. Retrieved November 29, 2023, from Explore Shopping Features in Microsoft Edge | Microsoft Edge
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