

SENG 310: Project Proposal

Shopping Saving Website

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Problem you are tackling:

We received a lot of input regarding the functionalities of the website. The pricing of the products were the biggest concern for the users. The users wanted to get more information than just the cheapest store, as they wanted to know the price listings from other stores, the product qualities etc. Another important factor was the Price Comparison Chart. The users usually get the price information on site and take some time to decide their choices. So, they wanted to know more about the price comparison without spending time. We interviewed three individuals who were very different than one another and their opinions were very different regarding the Payment Methods. Some liked the online payment option as it was easier for them, while others preferred paying cash. Some users did not prefer paying online as they do not believe it's safe and wanted easier payment methods like paying directly at the store. Another important problem was the lack of user interest in reading flyers. The users are always looking for best deals but they do not like to spend any time on reading flyers or go to websites of different stores. So, our challenge was to incorporate all the flyer information to our website so that the users do not have to go through the flyers. Finally, users were not sure about the delivery option as they never used delivery system for groceries. They were impressed by the idea but were still hesitant to try it.

Problem justification based on interviews

As shown in the data obtained from interviews, "price range" is overall the most prioritized aspect when it comes to grocery shopping. Yet, our data also showed that all participants gather price information "on site" or "through friends." This indicates a passive attitude towards comparing prices or searching of deals. To stretch this point further, participants on average spend less than 5 minutes to construct their price lists before shopping.

Together, these results show that our target users are generally grocery shoppers that care about prices, yet fail to find a convenient method to proactively create and optimize shopping lists. All our participant indicated that they are familiar with online shopping, but none of them use "the internet" as a source of grocery price information. This lead us to the belief that there is simply no usable online application that aids our users' grocery shopping needs.

Problems and Solutions

1. Price is an important factor

It is a well-known fact that price of items is an important factor when shopping. The results gathered from the interview showed that all three candidates choose price as their main priority when buying groceries. Some users preferred to buy items which are cheap and some preferred quality of the items based on the brands. Since the system mainly focuses on the price of different items and provide several options for users to select, we believe that this system would be really beneficial for users.

Solution:

The shopping saving website shows the cheapest price of a particular item the user is looking for.

2. Price Comparison

Price comparison is one of the main factors when shopping. People need to compare prices of items according to their budget. The questionnaires used in the interview show that people usually gather prices on site and it takes some time for them to compare the prices.

Solution:

The solution for this problem is that the website provides the prices of all the different stores in the city and it allows the user to select the cheapest store for the total price of all the items in the list.

3. Payment Methods

Shopper favour different payment methods to buy their items. The candidates who were interviewed prefer online payments and cash on delivery to purchase their groceries.

Solution:

The system supports online payments like PayPal (3rd party payment method), Visa and MasterCard. The system incorporates cash on delivery option which let users to choose cash on delivery because as long as the person checks the product there is no chance of fraud.

4. Deals from flyers and website

Flyers and websites from different grocery stores are used display deals and prices of grocery items. These become useful for shoppers who want to save money on grocery items. We have noted that all the candidates who were interviewed do not read flyers which limits them from gathering information on potential deals. This way they are unable to gather prices of items from different stores and it is time consuming for them to compare all the prices manually.

Solution:

The solution to this problem is that the shopping saving website shows the cheapest price of items in a form of a table from different stores. These prices also include the deals from flyers. This allows shoppers to save time reading flyers and get the cheapest price in one place.

5. Delivery

Some users prefer delivery service to get their purchased items home. They also wish to pay for items after the delivery.

Solution:

The system provides a feature for users to choose delivery options after they make their purchases.

Technologies that system support

Search items

Users may search for grocery items. They are given a list of items from different stores which can be added to their shopping list

User account system

Users are able set up accounts on the website. This way, the website can store various preferences of the users, thus saving them time. The users may also save customized shopping lists for future reference. Note that the suggested store of a shopping list may not be the same each time as different stores may offer different deals at different times.

Shopping list generator

The website provides pre-made shopping lists which can be modified by users. They may also create new shopping lists by adding items from the website. The website provides a table of items available in all stores. This table consists of a drop list to select different items the user may want to add to the shopping list based on the following:

- Item
- Brand of the product
- Quantity
- Amount

Users are may also remove items if they do not want certain items in their shopping list.

Multiple stores suggestion

The system shows the prices of each item at different stores in the form of a table. This table enables users to compare prices and check which store is most feasible for them. In the future, we could list the total price of items from each store at the bottom of the table and allow the user to select the preferred one.

Payment Methods

For the convenience of users, the following payment options are supported by the system:

1. Online payment – Credit and debit cards(Visa, MasterCard and American Express)
2. Papal
3. Cash on delivery

Store information

The store information page is used to provide information on store hours, locations and contact numbers. There is a map which shows the location of the user and the store. This page also shows different stores in that area and allows users to select the nearest and most convenient location.

Delivery

The website allows users to select home delivery service. This is a helpful way for users to save time without visiting stores to make purchases.

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graph TD
    MAIN[MAIN] --> CreateShoppingList[Create Shopping List]
    CreateShoppingList --> PriceComparison[Price Comparison]
    PriceComparison --> PurchaseMethodPickUp[Purchase Method: Pick Up]
    PriceComparison --> PurchaseMethodDelivery[Purchase Method: Delivery]
    PurchaseMethodPickUp --> PaymentMethod[Payment Method]
    PurchaseMethodDelivery --> PaymentMethod
    PaymentMethod --> Confirmation[Confirmation]

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MAIN
Gives users an overview and a starting point to the application

Functions

- Quick item search
- Introduction to the website
- Quick sign-in
- Contact support
- Sign up

Links

- Create shopping List
- Sign up

Create Shopping List
User picks out desired items for their list

Functions

- Expandable list of items organized in a hierarchical fashion that allows user to find their item efficiently

Links

- Price Comparison

Price Comparison
User compares prices of the list from different stores

Functions

- Generates price lists for different stores
- Displays location of the stores
- Allows user to choose from the generated lists

Links

- Purchase Method

Purchase Method: Pick Up
User confirms pick up details before proceeding

Functions

- Display store location, hour and contact info
- Map showing direction

Links

- Payment Method

Purchase Method: Delivery
User decides how the items will be received

Functions

- Display purchase method options

Links

- Purchase Method: Pick Up
- Purchase Method: Delivery

Payment Method
User chose the desired payment method

Functions

- Display payment options
 - Pay in person
 - Pay online (which leads to a third party payment client pages)

Links

- Confirmation

Confirmation
User gets confirmation of the purchase

Functions

- Display confirmation message
- Display summary/receipt

Links

- MAIN

