

SMILES FOR MILES

(E-COMMERCE WEB APPLICATION)

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Abstract

Smiles For Miles is a lifestyle e-commerce web portal, which retails various products based on Gifting articles like wishing cards, Fresh Flowers, Customized Cakes and most importantly hand-curated Gifts. The system allows the viewers to browse the portal and view various products available with their stock and description, accredit the registered user to purchase desired products instantly using PayPal payment processor (Instant Pay) and Net Banking as well. It provides an easy access to Administrator to view placed orders, order status, manage products and their categories too. The portal also allows the users to use several features like occasion reminder, internal messaging system, share your images with the portal, contact Décor manager, maintain wish list of the people, tracking of gifts etc. This web application deals with developing an e-commerce website which can help customers for finding customized gifts, moreover learning how to make those customized articles for their loved ones. It provides the user with an itemize or categories of different types of gifts available for purchase in the store which they would like to buy online from the portal itself. In order to assist online purchase system a shopping cart is provided to the user. The shopping cart will virtually store your added articles which you would like to purchase and even user can remove articles which they don't want to purchase. Further advanced features like occasion reminder, internal messaging system, share and update your images to the portal, making wish list of near ones, gift tracking and many more are provided to the registered users.

Keywords

Online gifts portal, Online gifts website, Online gifts purchase system, Online gift shops, Send gift online, Gift portal, E-commerce, Décor items.

1. Introduction

Users, who still purchase gifts physically, will now focus on purchasing gifts online. There are many online shopping systems available in market. But the question is why the users will use our system; the reason is many more functional features are provided to make it more user-friendly and customized. Online shopping is a merchandize store shopping that we done by go to the market, but instead it is done from the internet. Online portal offers product description, pictures of products from different angles, comparisons, prices; add to wish list or favorite and much more. For examples of these are ebay.com, Flipkart.com, Myntra.com, Amazon.com and benefits of online shopping is that by having direct access to consumer the online stores can offer products that feed to the needs of customer. Cookies are used to tracking the customer's choice over the internet or their interest whenever they visit the portal again. Users who surf internet these days are more attracted to the online shopping systems as a result with growing technology in the market they are more intended to buy on various platforms.

Smiles for Miles is a best platform to send gifts online to people and precise their love and bliss to create days of celebration like Birthdays, Friendship Day, Valentine's Day, Mother's Day, Anniversaries, Father's Day, Rakshabandhan and many other. Smiles for Miles is Gift Portal helps you to bridge the distance by sending unique gifts to your loved ones and near ones from our incredulous catalog of gifts, cakes, flowers, customized articles etc. System also provides some unique features like tracking of gift, occasion reminder and many more. We give you the authority to send gifts online to people globally. Exclusively special products for him and her are displayed and the prices are also mentioned in Portal. Once you have placed the order to purchase your gifts, you will receive an order id which will help to keep track of your gift. You can be insecure with express delivery of your gift with 24x7 delivery services. Users can also add some other gifts from different web applications like Amazon.com or Flipkart.com. Users can further learn to make some personalized and customized set of gift articles from the portal and they can also book their own personal event organizer or décor manager for managing their occasions. Payments can be made online through credit card, PayPal, debit card. [1][2]

2. Literature Survey

The prior state of art reveals a lot of work is done in this field of developing an E-commerce website for gift articles and many more products related to it.

For using portal the Online customers must have direct access to the internet in order to browse and view the articles. The customers must have a reasonable way to complete the transaction. Generally, higher levels of education and personal income correspond to more favorable insights of shopping online. Increased liability to technology also increases the probability of developing complimentary attitudes towards new shopping channels [4]. In [1], the author has proposed a system in which it links the user to gift shopping forum, where the user is presented with a list of shopping categories. Each category contains links to participating online retailers who provide gifts in the listed category. The online gift registry service of the present invention is a website that allows members to enter gift ideas in a gift or wish list (the terms "gift list" and "wish list" are used synonymously in

the present application) that is associated with an event, such as a birthday, wedding anniversary, holiday, or other gift-giving occasion.

Similarly, the another prior state of art reveals A gift reminder and purchasing system of the present invention comprises a user interface, at least network based gift reminder service provider, a gift reminder notification, and a network communication link permitting communication between the user interface, the gift reminder service, and a gift merchant site. The gift reminder notification is viewable on the user interface and is generated by the gift reminder service provider and includes a network link to a gift merchant website selling a gift related to the gift idea wherein the gift merchant website is not exclusively associated with the gift reminder service provider [5].

Further in [6], the author suggests the purposive invoice of the gift products, barter or forwards the giveaway (gift) before the article is shipped from the gift's seller. Methods, systems, and articles of manufacture consistent with the present invention, include a method for electronically forwarding a gift article from an intended recipient to a secondary recipient prior to shipping the online gift to the intended recipient. Order information related to the online gift is regained and displayed to the intended recipient. If the purposive consumer or recipient wants to forward the online gift to the secondary recipient, contact information on the secondary recipient is received from the foremost recipient so that the secondary recipient can then be acquaint about the online gift prior to physically shipping the gifts to the purposeful person.

Moreover, other work done in the same field [7], elaborates that the Security is the one of the significant aspect in online purchase. It suggests some important factors which assures productive online shopping.

- Multifariousness: The alternatives you can get for gift products are astounding. Consumers can get several brands of gift products from different vendors at one place. One can get to browse varieties of products without spending money on airfares. The online retail offers a far greater choice of colors, sizes, product stocks than finding locally.
- Price Competitiveness: Online retails make comparison and exploration of commodities and prices possible. It also gives you the ability to share information and reanalyze with other shoppers who have firsthand experience with a product or deal(in).
- Compulsive Shopping: Many a times when we go out on Shopping we end up buying things which we do not require or do not want to buy because of the store-keeper's up selling skills. Sometimes we even compromise on our lineup(selection) because of the lack of choices in those shops.

The inscription on a local online gift exchange system [8], focuses on online gift exchange in a framework where online and offline synergies are tightly entwined where most of the exchanges require face-to-face interaction to be completed. On the basis of Survey forms and logs of system usage, we analyze users' persuasions to contribute to the system and the community. Kassi is an online gift exchange system which was designed to support the theorized exchange of goods and services in geographically local derbies. Kassi is focused on the exchange of everyday favors such as borrowing items, sharing information, and helping other local community members in the course of daily life. The system does not encourage haggling overrates, nor is there functionality for putting up on goods or services. As with the other online services reviewed above, Kassi is a service for linking those who can hand something with those who hanker for.

4. The proposed system

Our proposed system overcomes the drawbacks of the above system in following ways:-

Going through the above given patents [3] and [5] the solutions overcoming can be stated as:

- Without any involvement of the shopping forums which will transfer the users to the online shop retailers, the registered users will be able to interact directly with the system and can also purchase articles.
- Our portal will have fully participation to select the desired article from various categories.
- Our proposed system allows the user to search and choose, add to cart and purchase their desired article from the portal.
- Our system provides occasion reminder which is maintained by the user and allows the non-registered user to view the articles and registered user to search, choose and purchase the articles.
- There is no such network link to the Gift Merchant website but all the customized articles will be available on our portal itself.

The solutions to Methods and systems for electronically conveying an online gift^[6] prior art:-

- In our system the intended recipient can only purchase but not exchange and forward the article as this portal only an e-commerce gift site.
- The order information of the online gift is not retrieved and displayed to the intended recipient but instead the order information is confirmed and then displayed to the one who is purchasing from their account and it is not for the one for whom the gift is been purchased.

Some advancement on An Online Gifts Store research^[7] :-

- Our system includes searching of desired gift from the portal itself and sending it to your loved ones, tracking of the gift, adding occasion reminder, sharing images on the portal of what they have purchased from the portal etc.
- The system does provide wide range of gifts including cakes, flowers, greeting cards, hand curated articles and many other products which are available from the other e-commerce sites like Amazon.com, Flipkart.com which can be combined with these gifts.
- The gifts purchased by the customer can be delivered anywhere i.e it can be in USA, Canada, Australia, etc. Further the user can also deal with some cool new updates in the goods and new unique features of the portal like internal messaging, sharing images etc.
- Our system focuses more on having the day to day sales of articles to customer's door step and by providing several other features for using the portal.

The application is divided into two modules first is the front-end which is for the customer who wish to buy the Gifts. Second is for the Admin who maintains and updates the information and Order Status which is done in back-end. The user's information regarding ordering an article, maintaining a wish list, adding an occasion reminder are stored in the Database.

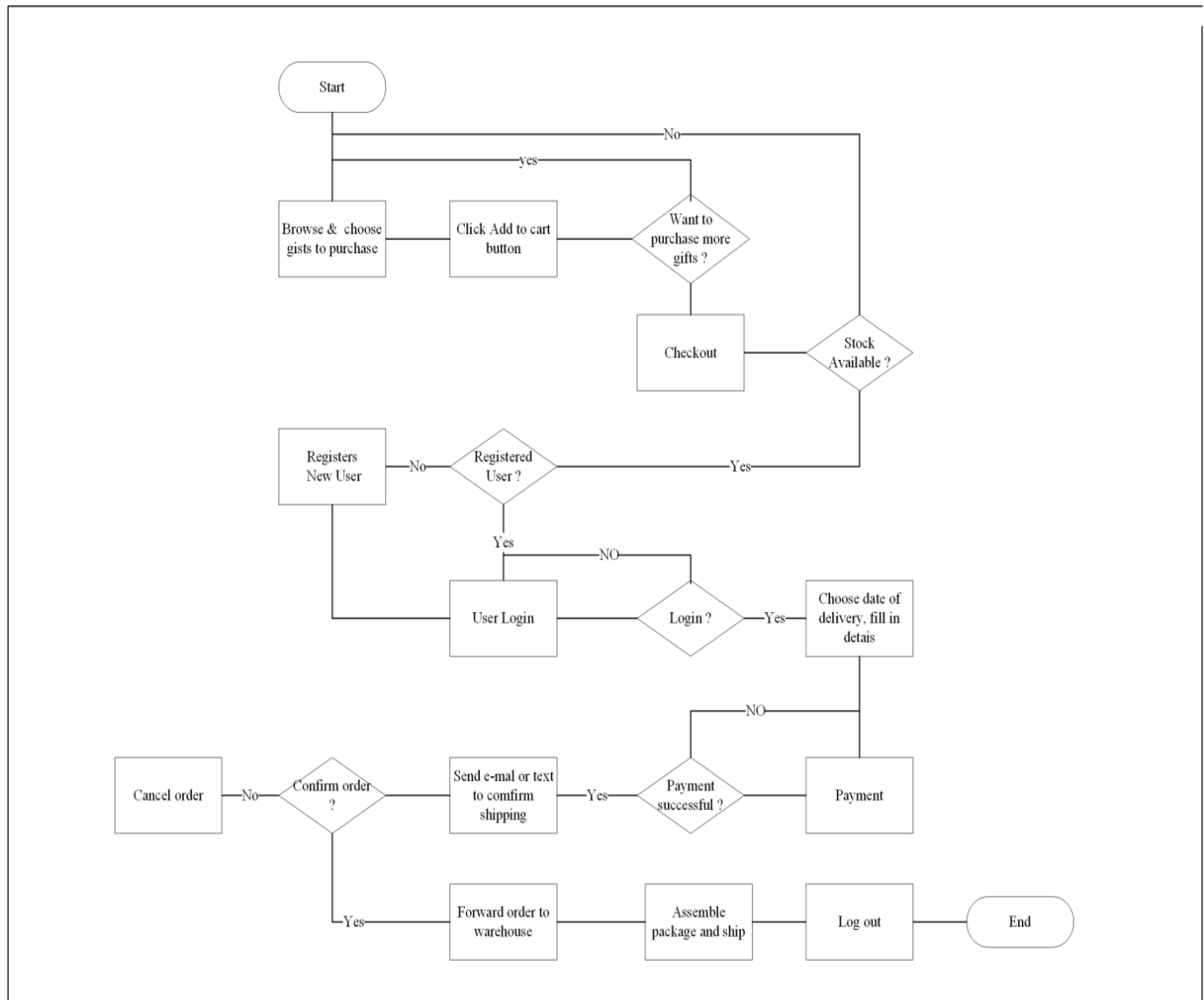


Fig:1-Block diagram of the proposed system

- User can browse and explore the portal for the categories of gifts, cakes, flowers, greeting cards and many other products from the other linked websites.
- User can add their liked products and articles to the add to cart option where they can add the products as well as remove the products from the cart.
- For purchasing the articles the user must register themselves. The available stock for the product with the product description is displayed using images taken from different angels.
- User can choose the date of delivery as well as the destination to which the article is to be delivered, if the user wants to cancel the order then it can be done before confirming the order and after adding to the cart the user can cancel the order.
- User can pay using online payment methods and via net banking.

Predictive analysis is done with the help of linear regression.

Linear regression is a method for estimating the value of a dependent variable Y , based on the value of an independent variable X .

Linear regression model representation for this problem would be:

$$Y = B_0 + B_1 * X$$

Where B_0 is the bias coefficient for Y column and B_1 is the coefficient for the X column. We use a learning technique to find a good set of coefficient values. Once found, we can link up different X values to predict the Y value.

By inputting a X value we get:-

$$Y = 0.1 + 0.5 * 182$$

$$Y = 91.1$$

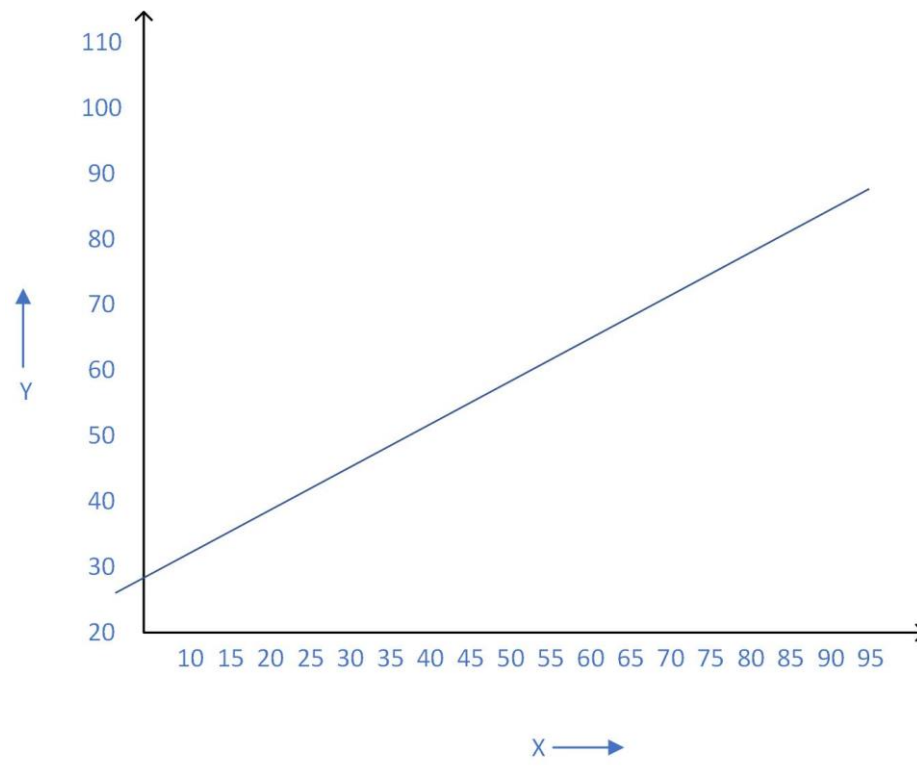


Fig: 2 Linear Regression

4. EXPERIMENTAL ANALYSIS AND RESULTS

The experiment is performed on the system with configuration of windows 8, 4th gen i5 processor, 8 GB RAM and 1 TB hard disk space. Various tools and technologies used are NetBeans IDE 8.2, Weka 3.8, JDK 8, Hibernate, JSP, JavaScript, MySQL 5.7.

- **Relative Absolute Error (RAE)**

Relative Absolute Error is kind of a simple Predictor which is very similar to **Relative Squared Error** which means average of the actual values. In this case the error is total absolute error instead of total squared error. Thus, the relative absolute error takes the total absolute error normalizes it by dividing by the total absolute error of the simple predictor.

Results of Predictive Analysis using Linear Regression.[16]

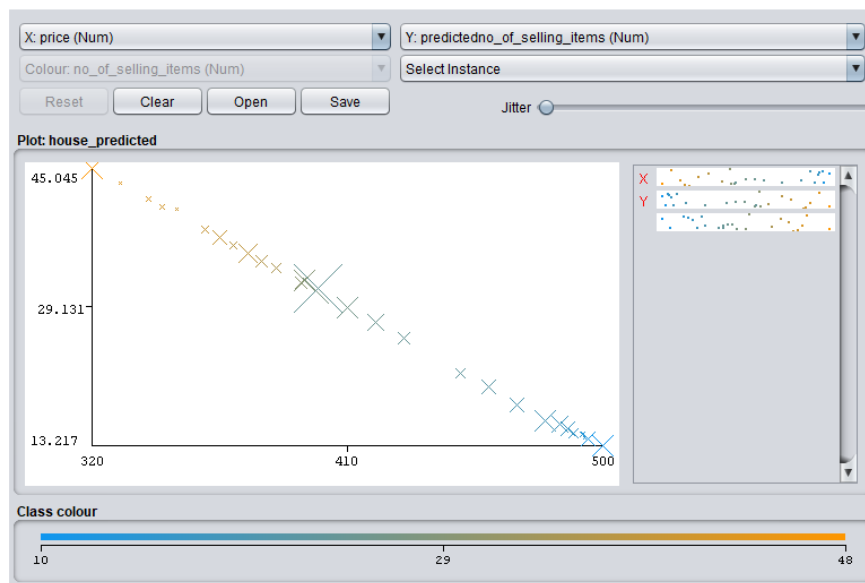
- **Correlation coefficient**

Correlation and **regression analysis** are related in the sense that both deal with relationships among variables. The **correlation coefficient** is a proportion of linear congreagation between two variables. They can indicate only how or to what extent variables are associated with each other.[17]

- **Mean absolute error (MAE)**

Mean absolute error (MAE) is a measure of difference between two Looped variables. Assume X and Y are variables of dichotomized observations that express **the** same actuality. **The Mean Error** is given by: It is also possible to identify **the** types of difference by looking at plot.[18]

- i. Chocolate Cake units to be sold(Predicted)
 No of unit sold = -0.1791 * price + 102.4528



Tabular analysis of above item

Table 1

Product Name	Correlation Coefficient	Mean Absolute Error	Relative Absolute Error
Chocolate Cake	0.9732	1.9809	20.5136%

5. Conclusion and future scope

The central concept of the application is to allow the customer to shop virtually using internet and allow customer to buy the items and get details of decorator. The information of products are stores on an RDBMS at server side. The server process the customer and the items are shipped to the address submitted by them. Thus, we conclude that the system for which we are working is beneficial for the user in many ways. The system for sure is user friendly and reliable.

Future enhancements may include the following things^[14]:-

- Second server for additional backup.
- Alternate designs for dashboard.
- Increased authentication if the client demands.
- We will provide live chat and help.

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