

E-Bakery shop System

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Abstract

This paper proposes an e-commerce bakery shop system that allows both bakery owners and customers to manage their daily activities of online buying and selling product by incorporating data mining technique. This system develops an Android application for customer to purchase the online product of their choice from different bakeries, get suggestions based on their choices and also to get notification /bill through email once the product delivered and a website is built for bakery owners to predict some of the features such as Fast, Slow moving products based on each day, area, are predicted and the system calculates which products are sold more, depending on their respective season/period products sold more in (monthly, yearly)are tabulated.

Keywords- *Online bakery shop, data mining-classification, Decision tree classifier Notification/bill through email.*

Introduction

Nowadays most of the people are purchasing the product online rather than going to the shop to save time and to purchase the product of their choice in cheap rate anywhere and at any time but they are so many different websites that offer the same product in cheap price and the customer have to search in each website about the product and compare the product price which is time consuming. The examples of online business are food ordering, bus booking, flight ticket booking, hotel booking and others. Electronic or e-commerce food ordering systems are one of the popular online businesses.. Various items of food can now shop through the internet such as fast food, bakery and others. Customers can view and select the product from bakery shop, add to cart, choose the delivery types, make payment, give rating and the order is complete.

However, most of the existing online bakery items ordering system was done only for single bakery shop and user have to download another app to compare the items, till now they have not included data mining technique in bakery shop system that helps both the bakery owner and customer to increase their efficiency and reduce the cost and time and also they do not have proper notification/bill services through email. To solve the above problem of existing system the e-bakery shop system is been developed.

The aim of this proposed system is to build a website for bakery shop that include n-number of bakeries and help them to increase their sales and improve efficiency by predicting some features such as Fast, Slow moving product based on each day, depending on area which product have sold more and based on respective season/period which product have sold more (monthly, yearly)by incorporating data mining technique and also to develop an android application for user to purchase the product, search the product from different bakeries, get suggestion about the product of their choice and also to get notification/bill through email after delivery.

Literature Review

Venkata Rajeev P et al.[1]proposed a web base system for recommending and comparing products which is sold online, and use natural language processing that automatically read reviews and to determine the polarity of reviews and used Naive Bayesian classification.

Rana Alaa El-Deen Ahmeda et al.[2] included eleven data mining classification techniques to find the best classifier for consumer online shopping attitudes and also to build a recommender system using decision table classifier to find the products that user is searching for in some websites.

Noorfa H. Mustaffa et al.[3]: build a system using rational unified process for bakery shop that provide the Short Message Service to notify customer when the order is ready for delivered and give flexibility in delivery options to the customer.

Dr. Bharti Joshi et al.[4] build a recommender system for online book shopping that helps the as user to buy the books per the user needs and interest and this system helps to solve data

Sparsity problem and combined two algorithms that is the collaborative-based filtering and association rule mining to get better performance .

Ming-Hsiung Ying et al.[5] proposed an online shopping website to search the commodity using ontology, and web mining technique to track consumer demand like when the commodity price of any website is lower than the consumer price conditions, then the system will notify to consumers

Methodology

Data mining techniques can be applied in any online business to increase their sales because it helps in extracting and identifying useful information from large amount of data that is why retailing companies operate purchase databases in a long way, such that all transactions are stored in arranged order.

A classification technique called decision tree classifier is used to predict some of the features which help the bakeries to increase their efficiency and helps them to reduce time and cost such as fast , slow moving products sold based on each day, based on area which product have sold more, depending on respective season which product have sold more in month and year, and customer can search items based on availability and overall rating of product and also get suggestion of products as per user needs and interest .

Module Description

In E-bakery shop system, there are 3 modules. Admin will login through the website and he add/view the bakeries. Once the bakery register, the admin can add the bakeries through the website.

once the bakery is accepted from admin the bakeries can add product ,update the product ,give discount, and also they can predict products such as fast moving, slow moving product based on each day, depending on area which product sold more, based on respective season/period which product have sold more in month and year using data mining technique.

User will login through android application and they can search the item, view n number of bakeries and order different product of their choice, they can get suggestions of product based on their interest and also they can rate the product.

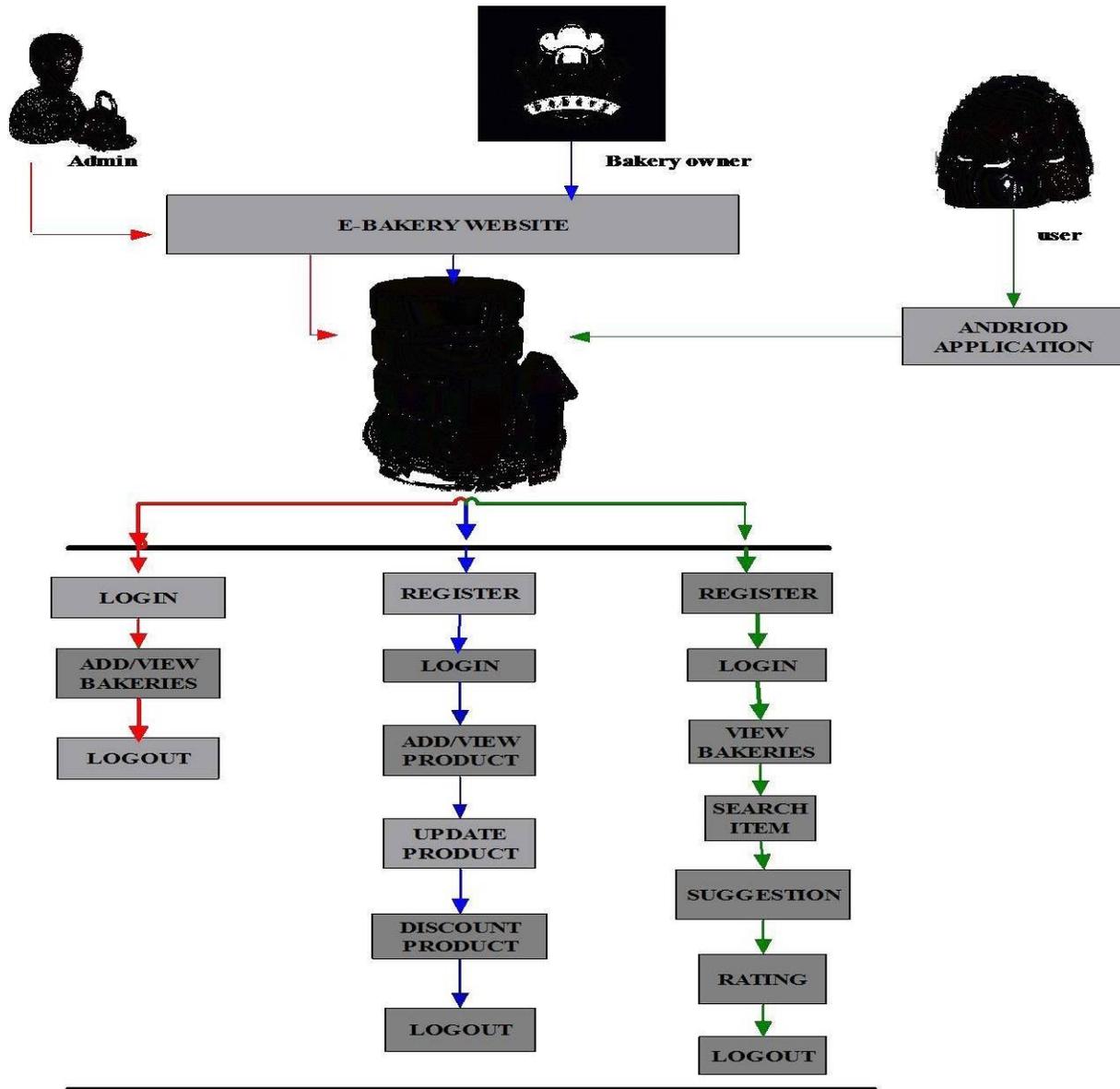


Figure 1 System Architecture

MODULES

There are 3 modules

Admin:

Admin will login using user id and password.

[1] Admin will add/delete/view bakeries.
Bakery shop

- 1 Bakery shop will register and login
- 2 They can add, update the product
- 3 They can discount on products and view the products
- 4 They can predict products like(fast moving, slow moving, Area wise, Season wise)

User

[4] User will register and login

[5] User can view the bakeries.

[6] Search items.

[7] User can give the suggestion and rating

Conclusion and Future Work

The E-Bakery Shop System helps both the bakery owners and users to improve the efficiency and reduce the time and cost. Predicting features like which products have Sold More, Sold Less, in each day ,based on area predicting particular product sold more, based on respective season/period predict most sold products in month and year .through this the bakery owner will improve efficiency, save time and cost. The customer will also get benefits to search product from different bakeries and buy the best product from best bakeries with their appropriate cost based on rating and availability of product and also get suggestions about the product based on their choice and get notification/bill through email once the item delivered.

For further work prediction can be applied to other data mining technique and also they can add extra features to the proposed system to help both the bakery owner and customers.

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