



AN APPROACH TO E-COMMERCE PRODUCT RATING BASED CUSTOMER REVIEW MINING

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Abstract: The system takes review of various users, based on the review, system will specify whether the products and services provided by the E-commerce enterprise is good, bad, or worst. We use a database of sentiment based keywords along with positivity or negativity weight in database and then based on these sentiment keywords mined in user review is ranked. This system is a web application where user will view various products and purchase products online and can give review about the merchandise and online shopping services. This system will help many E-commerce enterprises to improve or maintain their services based on the customer review as well as to improve the merchandise based on the customer review.

Introduction

This paper is a website that takes the reviews of various users who purchases products through E-commerce websites. Through online shopping many E-commerce enterprises were unable to know whether the customers are satisfied by the services provided by the firm. This boost us to develop a system where various customers give reviews about the product and online shopping services, which in turn help the E-commerce enterprise and manufactures to get customer opinion to improve service and merchandise through mining and customer reviews.

System Analysis

System analysis is works with users to identify goals and build system to achieve them .It is an important phase of any system development processes. The system is studied to its minute details and analysed. In analysis, a detailed study of the operations performed by a system and their relationship within and outside of the system is done. One aspect of the analysis is defining the boundaries of the system and determining whether or not the candidate system should be considered.

Existing System

Electronic Commerce is process of doing business through computer networks. A person sitting on his chair in front of a computer can access all the facilities of the Internet to buy or sell the products. Today customer can rate e-commerce products according to their opinion online. Customer can give different rating that will be helpful for the another customer who wish to buy that product. So the customers can decide whether that is good product or worst product.

But today's e-commerce system faces many challenges, today customer can rate the system in different numbers only. They cant rate the system on text format, so to overcome these problem we introduces a new system which use text mining technique.

Proposed System

The proposed system overcome these challenges which are mentioned in existing system. The proposed system uses text mining approach to rate the products. System will take review of the customer about the merchandise and online shopping service and will rate the merchandise and online shopping services. This system will help E-commerce enterprise to know about their customer services as well as about the merchandise.

The system takes review of various users, based on the review; system will specify whether the products and services provided by the E-Commerce enterprise are good, bad or worst.



We use text based analysis along with positivity or negativity weight in database and then based on these sentiment keywords mined in customer review, product and services provided by the E-commerce enterprise is ranked.

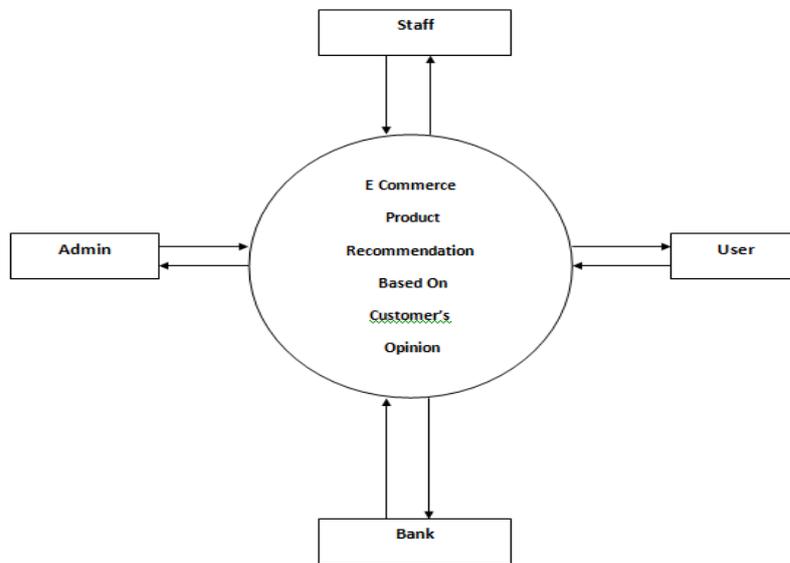
Elements

The modules in E-commerce Product Based On Customer Review Mining contains 4 modules and they are following:

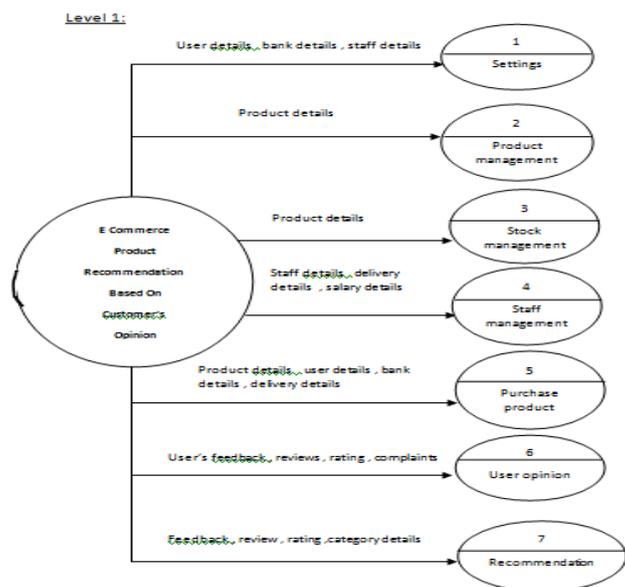
- 1.User
- 2.Satff
- 3.Bank
- 4.Staff

User modules includes purchase product, add rating reviews and feedbacks, payment. The staff module includes stock management, add product. Bank modules includes payment . Admin module includes add category, add subcategory, staff management.

Level 0:



Level 1:





System Design and Development

Input Design

Input design is the process of determining inputs to a particular project. Input design determines whether user interacts with the computer in an efficient manner. Some sample screenshots are attached in appendix part. E-Commerce Product Recommendation Based On Customer's Opinion uses the following different user interfaces for inputting values or data to the system. Some of them are:

- **login.aspx**
User, bank, staff and admin get a login page where they have to give user name and a password for authentication. If they will enter into their home page.
- **reg.aspx**
The user gets a sign-up page for registration. At the time of registration users must type all details for schemes. They have given user name and password for authentication..
- **addstaff.aspx**
This page is used by admin to register staffs. Add staffs get username and password through mail.
- **bankreg.aspx**
This page is used by admin to register banks. And banks get username and password through mail.
- **addproducts.aspx**
This page used by staffs for adding products.
- **category.aspx**
This page used by admin for add category.
- **subcategory.aspx**
This page used by admin for add subcategory.
- **shop.aspx**
This page is used by users to purchase the products.
- **addreviews.aspx**
This page used by users to add review about the products.
- **feedback.aspx**
This page used by users to add feedback about the products.
- **rating.aspx**
This page used by users to add rating to the products.
- **complaint.aspx**
This page used by users to add complaints about the products.

Output Design

The output design has been done so that the results of processing should be communicated to the user. Effective output design will improve the clarity and performance of output. Following are some of the output user interfaces designed for E-Commerce Product Recommendation Based On Customer's Opinion.

- **verifyuser.aspx**
User can authenticate the login page by using username and password
- **approveuser.aspx**
The admin approve the users.
- **viewcomplaint.aspx**
Admin can view complaints which are given by the users.
- **view product status.aspx**
Users can view their purchase status.

Database Design

A database is a collection of related data. By data, we mean know facts that can be recorded and that have implicit meaning. Defining a database involves specifying the data types, structures and constraints of the data to be stored in the database. The general objective is to make database access easy, quick, inexpensive and flexible for the user. Normalization is done to get internal consistency of data and to have minimum redundancy and maximum stability. This ensures minimizing data storage required and optimizing for updates. The data in the system has to be stored and retrieved from database. Designing a database is a part of detailed design. Data elements and data structures to be stored have been identified in the analysis stage. They are structured and put together to design the data storage and retrieval system.



Result

The screenshot displays a web application interface. At the top, there is a banner with the text "ONLINE SHOPPING CENTER" overlaid on an image of hands holding several colorful shopping bags. Below the banner is a navigation bar with a home icon and the text "Home /". The main content area shows a user profile with the following details:

- user_id: 16
- name: abin
- dob: 3/15/1974 12:00:00 AM
- age: 42
- gender: male
- address: sdfyh
- email_id: abin@gmail.com
- phone_no: 1234567890
- bank_id: 4
- ifsc_code: gh
- branch: fg
- account_no: 32157668
- dateofreg: 10/4/2016 12:00:00 AM

Below the profile information is an "Edit" button. At the bottom of the screenshot, a Windows taskbar is visible with the time 11:19 AM.

Conclusion

It is a website, that takes the reviews of various users who purchases products through E-commerce websites. The system takes review of various users, based on the review, system will specify whether the products and services provided by the E-commerce enterprise is good, bad, or worst. We use a database of sentiment based keywords along with positivity or negativity weight in database and then based on these sentiment keywords mined in user review is ranked. This system is a web application where user will view various products and purchase products online and can give review about the merchandise and online shopping services.

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