FAKE PRODUCT REVIEW MONITORING

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ABSTRACT: The extent and desire for online stores & e-commerce platform is booming, and so many consumers are using these sites to buy products. As an outcome, the amounts of item comments are shown in depth for consumers to analyze the product that have been purchase. These can work against users because users can often overwhelm the review with extreme views that can either help or hinder the item. As a consequence, we must really be alert since it can be handled by merchants to improve the value of the item or by the user to lessen the item's reviews. These reviews could be considered as genuine or bogus in overall.

Keywords: e-commerce, analyze the products, hinder, alert, reviews.

I. INTRODUCTION

One of its fastest expanding segments is ecommerce. In general, e-commerce allows customers to leave feedback about their experiences with the company's services. The fact that these assessments exist can be used as a source of data. Companies, for example, might use it to make design decisions about their products or services. Unfortunately, the value of the review has been abused by some parties who have attempted to generate fake reviews, not only to enhance the awareness of the product and to undermine it. They post their ideas on the internet. It is common human habit to conduct a poll on a product before buying it. Customers can evaluate different brands and conclude a desirable output based on reviews. These online reviews have the potential to affect a customer's mind about a product. If these reviews are accurate, users will be able to choose the right product to meet their needs.

Online sources are becoming increasingly vital in recent years in terms to purchasing purchases. This is due to fact that these reviews can give buyers with a wealth of information about the product or service. Spammers, on the other hand, may fabricate and publish bogus reviews in order to promote fictional items or services and to lower the quality of such goods or services. Customers will be deceived and make poor decisions as a result of spammers' actions. As a result, finding bogus (junk) ratings is a major challenge. Opinion spamming is the act of using excessive and illegal means, such as posting a huge number of fake reviews, to generate skewed good or negative opinions about a specific product. In order to push or demote it. Fake, spam, or bogus reviews are made for this reason, and the authors responsible for creating such deceptive content are known as fake or spam reviewers.

II. STATUS OF CUREENT AVAILABLE SYSTEMS

Based on the results of various surveys, this can be stated that individuals study and are swayed by online service reviews. According to a poll conducted by a popular website, more than 80% of online customers glance at the available reviews. 50% of people make purchases based on product reviews. Before buying a product, 30% of clients check the reviews of similar items. Consumers, as well as the corporations that provide such goods, clearly value the feedback provided by other users. Customers' ideas are kept in blog, sites, forums, and other places, making them useful and vital sources of textual data. As a result, today's people, particularly the elderly, heavily rely on online reviews. It indicates that individuals analyse and reflect on existing opinions on items while deciding why not to buy them. It is very likely that if a new client or users gets a true general evaluation of a product by evaluating affect for that product, he will actually purchase the product. In most cases, if the percentage of positive and effective opinions is high, the general view is likely to be positive. Similarly, if the overall impression is poor, it is unlikely that customers will purchase the product. Users too can write any opinion text, which may encourage individuals and groups to provide unworthy spam opinions in order to support or not credit certain target items, services, groups,
individuals, or even ideas without disclosing their genuine motives. Opinion bait is the name for this type of blasted material.

III. USERS OF THE SYSTEMS

Users of the system are

- Individuals customer login.
- Admin login
- System administrator.

IV. PROPOSED SYSTEM

By identifying the IP, this tool will spot bogus review created by the digital marketing team. The user enters the site via his user id and password, view merchandise, and write a review for each one. To determine if a post is false or genuine, the state looks up the user's IP. If the system notices a pattern of fake reviews being sent from same IP, it will notify the admin & ask that the review be removed from the system. This system employs data mining techniques. This technique aids the consumer in locating accurate product reviews.

1. The system's admin will add products.
2. Before beginning the analytic process, data is preprocessed to remove any irrelevant information.
3. Reviews with inappropriate content or swear words are omitted and are removed from the dataset.
4. When words are extracted into a type of dictionary, or so-called 'Bag of Words(BOW)', the score for each word is determined.
5. The emotion score of each review is derived after the reviews have been balanced on a scale of -1 to +1. If they exceed 0.5, they constitute spam.
6. Survey shows is based of their specific elements after junk removal.
7. The popularity of a particular review is also taken into account; if users appreciate a review, it suggests it is beneficial to the product.
8. All of the modules have been applied, and the final result has been interpreted on the admin side, with the necessary actions done in response to the evaluated reviews.

Fig 1

LEVEL 0
Fig 2 LEVEL 1
Fig 3 LEVEL 2

Fig 4 LEVEL 3

Fig LEVEL 4
V. TECHNOLOGIES TO BE USED

Visual Studio is a Microsoft Application Framework (IDE) for creating GUIs, consoles, Web applications, online apps, mobile apps, cloud, and online services, among other things. You may write both managed and native codes with the help of this IDE. It makes use of Microsoft's different software development platforms, such as Desktop App, Silverlight, and Window API, among others. Since it is used to write code in C#, C++, VB(Visual Basic), Python, JavaScript, and a number of other languages, it is not a language-specific IDE. It may be used with a total of 36 different languages. The operating systems Pcs and Mac OS X all are supported.

Microsoft's SQL Server is a database server. The MS relational database management system (RDBMS) is a piece of software that primarily stores and retrieves data for other applications. These apps can operate on the same machine or on a different one. In order to fully comprehend what a SQL Server is, you must first comprehend what SQL is. SQL is a special-purpose computer language that is used to manage data in relational databases. As per the client-server concept, a system is a computer application that offers services to other applications or systems. As a result, a Sql is a data center that uses the Structured Query Language as its query language (SQL).Microsoft SQL Server comes in a variety of flavors, each catering to distinct workloads and demands. The datacenter version is meant for upper ranks of user support and scale, while the Fast version is a free, scaled-down version of the application.
VI. IMPLEMENTATION

Use Case Diagram for Online Shopping Website

Fig 6 Use Case Diagram

Fig 7 Sample Output: Home Page

Fig 8 Sample Output: User Login Page
VII. CONCLUSION

Our search led us to the premise of recognizing topic abuse in unstructured textual data became a major research challenge. Although various algorithms have been applied in opinion spam analysis and have shown good results, no system can tackle all of the obstacles and difficulties that today's generation faces. While assessing each report, it is critical to evaluate key quality metrics such as helpfulness, usefulness, and utility. Many complex approaches are described in the literature surveys, which define sentiment analysis with respect to analysis and then post genuine evaluations on genuine products. Also, the consumer may do that if the products come on that application, as well as reviews. We'll endeavor to enhance the mechanism for determining the sentiment score of reviews in the future. We'd also like to keep our glossary of sentiment words up to date. To acquire a more exact derived score of review, we would try to add new words to the lexicon and alter the weight applied to such words. Any new application that follows data mining rules are using sentiment or opinion mining. Future study should focus on implementing the system and evaluating its performance using the proposed approach on a variety of benchmark data sets. Our main goal is to develop a system for detecting fake & redundant reviews and filter them out so that users have accurate information about the product. Our project's goal is to improve consumer satisfaction while also making online buying more secure. There will be several parts to the projects. Our programmer will assist users in paying for the correct merchandise without falling victim to any scams. By implementing opinion mining algorithms and establishing a word dictionary, our application will be able to detect phoney reviews. The suggested approach is capable of recognizing positive and negativity deviations in reviews and ratings. The system is simple to use and set up. It may also track users with the same IP address, preventing false information about the product from spreading. The system efficiency, as well as its ease of implementation and use, are its primary benefits. The admin can readily monitor the review analysis process in the system. It will state the future works in a variety of methods in this document. Various methods for detecting spam reviews were explored in order to improve the accuracy or use of opinion mining. A full description of existing strategies for determining whether or not a review is spam is given. In order to acquire more reliable data from Opinion mining, other methods such as IP Tracking and Ontology are used to spot Fake Review. After detecting spam reviews in the original Dataset, a new Data without spam reviews is established, and opinion mining is performed on the new Spam Filtered Dataset. Finally, a novel technique is developed that more accurately finds fake review and performs opinion mining with spam-filtered data.

VIII. REFERENCE