

Fake Product Review Monitoring and Removal for Proper Ratings

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Abstract:-In today's world, an e-commerce website's healthy growth is seen only when there is a huge presence of its user. The presence of users is seen in virtual world by the reviews they post after they use or buy the product. The reviews given to a single product determines whether the product holds credibility. In recent times it is seen that the companies tend to provide reviews to its own product in order to increase its sales, and on other hand there are some users who tend to degrade the product by giving fake negative reviews. Hence, a system which can detect such types of fake reviews, be it positive or negative is needed. These reviews are also important in terms of the future progress of the e-commerce website as this reviews helps to overcome the negative aspects in the e-commerce website.

Keywords:- Fake, Review, Products, Online, Shopping, Genuine, Proper, Ratings

I. INTRODUCTION

Reviews are every user's individual opinion regarding products they bought from the website along with the services provided to them by the company. The reviews they provide prove to be of extreme help to the future consumers or users, they help the users to make proper decision before purchasing a product or service. As users are provided with great offers and deals online they tend to use the e-commerce website to purchase the products, but sometimes there might be cases where the users are not provided a expected product or service, at this point the reviews of product comes in use.

Reviews are important for both the company's management and the user. There are cases where the company's management team attempted to get positive reviews about the product to increase sales of the product, whereas on the other hand there were also attempts to degrade a genuine

It is noticed that huge number of duplicate and reviews written by same users on same products and also different products.

Three types of review monitoring system could be implemented.

1) Rating deviation from its average rating

2) Sentiment analysis of the product review.

3) Off-topic score of review.

The system work is such a way that it is able to determine the positivity and negativity of the reviews and analyse the genuinity in the reviews provided by the users.

II. LITERATURE SURVEY

It is very difficult to detect a fake or spam reviews. The fake reviewers provide undeserving reviews to the products in order to increase or decrease the sales in less amount of time. There are three types of reviews seen

A. Opinionated false reviews:-

These reviews contain a number of opinions which could be harmful for the sales of the product.

- *Positive reviews:-* These type of reviews provide false or undeserving reviews and ratings in order to increase the sales of the products
- *Negative reviews:-* These types of reviews are posted in order to damage the the sales of the product.

B. Reviews on brands only:-

Such reviews are not regarding the product but the company which provides it. These types of reviews do not help the quality sales of the product.

C. Non reviews:-

These types of reviews are not eligible to be called as reviews as they are not regarding the product itself.

There were some systems earlier developed to tackle the problems of fake reviews,

1. Detection of spams using ratings behaviour:-

While detecting spams, it is necessary to look at behaviour of the ratings, there is chance of spammers spamming the product for no reason, even if there is no issue with product itself, at this point the overall ratings come to the rescue.

2. Spotting a group of fake reviewers:-

A group of fake reviewers can be identified using their Ip address, numerous reviews posted to same product are

considered as spam as they could be posted in order to degrade the product sales.

3.online reviews manipulation:-

As ratings could be in numeric or textual manner,it can be easily manipulated by spammers,hence it is necessary to manipulate the reviews in graphic format which will be determining the positivity and negativity in the reviews along with it genuinity.

III.PROPOSED WORK:-

The system proposed will include some methods like,

A.understanding deviation of ratings:-

The ratings or reviews which are showing a trend of continuous growth but suddenly shows negativity is simply displaying a deviation from the normal ratings.

B.Ip address detection:-

Detection of ip address which will help the admin to check whether the given reviews are from valid users or are from a spammer.

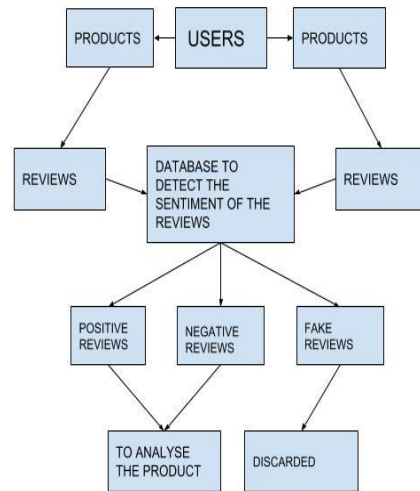
C.Sentiment analysis of the product review:-

It is necessary for system to understand whether the review is positive or negative,which will further help to understand deviation from either of the positivity or negativity in the reviews.The analysis will help to understand overall aspect of the products so that few spam reviews will not affect the overall statics of products.

Steps

- 1.The ADMIN/USER can login and have their respective authorization in system.
- 2.The posted reviews will undergo the process of sentiment analysis,ip address track,and its deviation from overall review analysed.
- 3.If any miscalculation is found in the reviews which are analysed,are then handled by the system admin only.

FIGURE 1 THE PROCESS OF PRODUCT REVIEW ANALYSIS.



IV.CONCLUSION

The proposed system is capable of understanding the deviation of positivity and negativity in the reviews and the ratings.The system is easy to use and implement.It can also track the users of same ip address thus preventing spreading of false information regarding the product.The proposed system is capable of analysing the aspects of product review in the sense it is posted,i.e it can properly determine genuinity in the review.The major advantages of this system is its efficiency and the ease to implement and use it.The admin can easily track the analysing process of reviews in the systems.

V.REFERENCES

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