Filter Unwanted Messages from Walls and Blocking Non-Legitimate Users in OSN

Miss. Gaikwad Rupali B.[1] Miss. Kharat Mohini K.[2] Mr. Tamhane Ajinkya V.[3]
Mr. Harde Pradeep S.[4]
[1,2,3,4]Department of Computer Engineering
[1,2,3,4]SCSCOE, Rahuri Factory

Abstract— Today's life is totally based on Internet. Now a days people cannot imagine life without Internet. Information and communication technology plays vital role in today's online networked society. In today's life, we are very close to the online social networks. Online social networks are used for posting and sharing information across various social networking sites. But user's privacy is not maintained by online social networks. For maintaining users sensitive information's privacy online social networks provides little or no support. For filtering unwanted messages we propose a system using machine learning (ML). Using machine learning in soft classifier content based filtering performed. In proposed system filtering rules (FR's) are provided for content independent filtering.. Blacklists are used for more flexibility by which filtering choices are increased. Proposed system provides security to the Online Social Networks.

Key words: Online Social Networks, Machine Learning, Information Filtering, Content based Filtering

I. INTRODUCTION

Online social networks are today's are very popular interactive medium for communication, sharing and dissemination of large amount of human life information across various social networking sites. In communication, exchange of different types of content like text, image, audio, and video data. For useful information extraction filtering is used. In OSN's for posting or commenting or posts on particular public or private area called walls. Using information filtering user can control the messages written on their walls, by filtering out unwanted messages. Today OSN's provide little support or no support for unwanted messages. But no content based filtering supported. Therefore, It is hard to prevent unwanted messages, such as political or vulgar. Therefore Proposed a system for filtering or preventing unwanted messages called Filtered Walls (FW's). Use Machine Learning (ML) text categorization techniques[5]. For short text classification use radial basis function networks (RBFN), In managing noisy data[6]. We insert two level classification strategy, in first level RBFN categorize short messages as a neutral and non-neutral; in the second, Non-neutral messages are classified and correctness estimate are produced. In proposed system filtering rules are provided. FR's are the rules in which user can stste what contents are not displayed on their walls. In addition the system used user defined Blacklists (BL's). In which it makes lists of users that are temporarily prevented to post any type of messages on a user wall. Proposed system filters unwanted messages from OSN user walls. On the basis of message content and message creator relationship.

II. LITERATURE SURVEY

We are using Content based filtering and Policy based Personalisation for filtering unwanted or vulgar messages or text from users Online Social Networks (OSN) walls. So for that purpose we are surveying the literature in both fields. The Main motive of this paper is to implement an architecture which provides customized content based filtering for OSN's, based on machine learning techniques. Our related work is related with both content based filtering and Policy based personalisation.

For Example: In Facebook user states who is allowed to insert messages on their walls (like friends, friends of Friends and Groups of friends) but no content based filtering are supported.

A. Content based Filtering:

In content based filtering, each user is assumed to work separately. A content based filtering collects the information of items based on the relationship between the item's content and the user choices. An electronic mail is well known example of Content based filtering. Only textual data is processed in content based filtering, Therefore content based filtering is closely similar to Text Classification. Content Based filtering is based on the use of machine learning paradigm. According to machine learning paradigm a classifier is automatically induced by learning from a sets of predefined examples. The Information Retrieval is presented by P.W. Foltz and S.T. Dumais [1].There is no information filtering in this approach.in our approach we are using information filtering. Information retrieval is very much similar to information filtering. filtering involves process of removing information from stream, while IR involves process of finding information in that stream.

B. Policy Based Personalization:

Policy based personalization is useful in different types of contexts. In Online Social Networking sites user defined policies can define how communication between two parties or more parties can handled. The policy based personalization mostly focuses the Twitter. It categorizes the each tweet and only shows those tweets which are of user's interest. Policy based personalization shows the ability of use to filter unwanted messages based on filtering criteria suggested by him or the customized settings chosen by him

B. Sriram, D.fuhry, E.Demir, H. Ferhatosmanogly, and M. Demirbas [2], our paper describes classification of tweets into general. our approach allows settings of filter rules according to a variety criteria's described by him and classifies the text into various pre-defined sets of classes like various categories like sports, politics, Bollywood etc.

L. Fang and K. LeFevre [3], this paper is related to privacy control but no facility for stopping anyone for

posting something on wall. Our approach can stop posting particular categories as per users choice.

Fong, P.W.L., Anwar, M.M., Zhao, Z. [4], this paper describes policies such as topology based, history based. So that it is time consuming our approach presents content based filtering and Policy based personalization.

III. PROPOSED SYSTEM

From above literature survey we can conclude that there is no any prevention on post which is posted by friends or any person. So, if any person is not interested to see or to read specific category of messages then he cannot apply any filter on their walls. In this situation he can receive any type of messages.in our proposed system we apply prevention to messages by using or providing filtering rules. The main aim of system is to prevent or filter unwanted messages from user walls. In proposed system, filtering are supported by content based preferences. The main part of proposed system is content base message filtering(CBMF) and the short text classifier module. The second element that is short text classifier are used to categorize messages according to set of different categories. In comparison, the first element uses the message categorization provided by short text classifier to implement filtering rules specified by the user. For enhancing the filtering process Blacklist can also be used. Blacklists are the list of users which are temporarily prevented to post messages or text on user walls.

In our system architecture we designed a filter to discard those messages which are vulgar in nature and prevented to be displayed on another users wall. If User1 wants to posts some content on someone's wall then before it will display on that user wall, it will be checked that whether the content is vulgar, we have provided predefined dataset which include those words which are vulgar in nature. If User1 data matched to the dataset then this message is vulgar in nature so it cannot displayed on wall and that user who wants to write message will be blocked. This process is carried out through user defined rules and in some cases BlackList(BL) are also used.
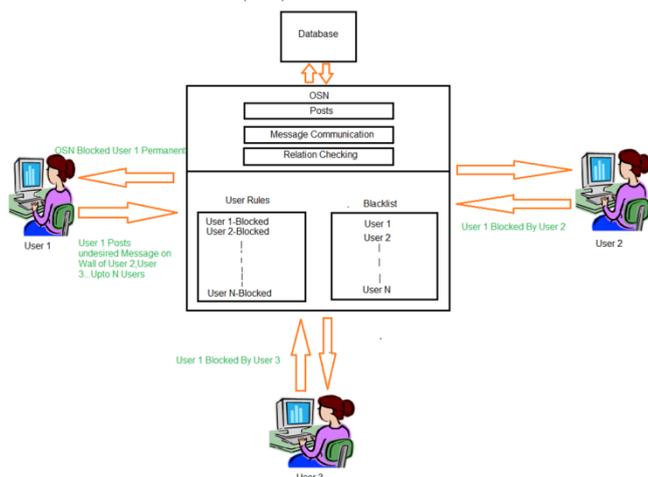

Fig. 1: System Architecture

IV. CONCLUSION

In our proposed system, Filtered wall is a system to prevent or filter unwanted or unnecessary messages from online social networks walls. This system approach decides when

user should be inserted into a blacklist. Filtered wall has a wide variety of applications in OSN wall. In future, more work is needed on further improving the performance measures.

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