Social Media Comment Analysis

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Abstract- *The Internet is the sole foundation of contemporary society. People today have a hard time imagining life without the internet. People have been utilizing social networking sites in recent years to exchange information, thoughts, and ideas. Different types of content, including text, images, audio, and video data, may be used in these exchanges. Giving users the opportunity to manage the messages posted on their own private space is a significant problem in today's online social networks (OSNs), since it prevents the broadcast of inappropriate information*

I. INTRODUCTION

Empowering Social Network Users Through Enhanced Content Management

The internet has become the lifeblood of modern society, seamlessly weaving its way into our daily lives. Social networking sites have emerged as a key cornerstone of this online landscape, providing platforms for information exchange, idea sharing, and connection. These platforms, teeming with diverse content ranging from text to multimedia, offer exciting opportunities for interaction and self-expression. However, a crucial aspect often overlooked is the **user's ability to manage content within their own personal space**. Unfortunately, current online social networks (OSNs) fall short in providing adequate tools for content control. This leaves users vulnerable to unwanted information and potential privacy breaches. As a result, **ensuring robust security and safeguarding user privacy within OSNs is paramount**. Although limited security measures exist, they often lack the granularity and customization needed for individuals to truly control their online experience.

II. SCOPE OF THE PROJECT

analysis helps in gauging user sentiments and preferences. By understanding how users respond to content, platforms can enhance the user experience by tailoring content recommendations, addressing concerns, and fostering a positive online environment. Comment analysis is vital for identifying and filtering out inappropriate, offensive, or spammy content. This ensures a safe and respectful online space, protecting users from harmful interactions and maintaining the platform's integrity.

Analysing comments provides insights into what topics and content resonate most with the audience. This information can be leveraged to optimize community engagement strategies, creating content that aligns with users' interests. For businesses and brands active on social networks, comment analysis is crucial for monitoring brand mentions Comment and managing reputation. Identifying positive and negative sentiments helps in responding promptly to customer feedback and concerns.

III. REQUIREMENT ANALYSIS

OBJECTIVE OF THE PROJECT

The primary objective of the project on comment analysis in social networks using machine learning techniques is to address key challenges and fulfill specific goals that contribute to enhancing the overall quality and safety of online interactions. Develop and implement machine learning models for comment moderation to automatically filter and flag inappropriate, spam, or offensive content. This ensures a safer and more positive online environment.Employ sentiment analysis techniques to understand and classify user sentiments expressed in comments. This enables platforms to gauge the overall mood and opinions of their user base.Utilize machine learning algorithms for topic modeling to identify and categorize the main themes and topics discussed within user comments

IV. SIGNIFICANT OF THE PROJECT

By employing machine learning for comment analysis, the project aims to enhance the overall user experience within social networks. Understanding user sentiments, preferences, and behaviour rs helps in tailoring content and interactions to meet user expectations. Social networks are prone to inappropriate and harmful content. Machine learning-based comment analysis provides a robust solution for content moderation, automatically filtering out offensive, spammy, or inappropriate comments. This

contributes to creating a safer and more welcoming online environment.

For businesses and marketers, comment analysis offers valuable insights into consumer opinions, trends, and preferences. This information can be leveraged to refine marketing strategies, improve products/services, and enhance customer satisfaction. Understanding user sentiments and preferences enables social platforms to optimize community engagement strategies. By identifying popular topics and sentiments, the project facilitates the creation of content that resonates with the audience, fostering increased interaction and user engagement.

V. EXISTING SYSTEM

In content-based filtering each user is assumed to operate independently. As a result, a content-based filtering system selects information items based on the correlation between the content of the items and the user preferences as opposed to a collaborative filtering system that chooses items based on the correlation between people with similar preferences. While electronic mail was the original domain of early work on information filtering, subsequent papers have addressed diversified domains including newswire articles, Internet "news" articles, and broader network resources. Documents processed in content-based filtering are mostly textual in nature and this makes content-based filtering close to text classification. The activity of filtering can be modeled, in fact, as a case of single label, binary classification, partitioning incoming documents into relevant and non-relevant categories. More complex filtering systems include multi-label text categorization automatically labeling messages into partial thematic categories.

VI. PROPOSED SYSTEM

On-line Social Networks (OSNs) are today one of the most popular interactive medium to communicate, share and disseminate a considerable amount of human life information. One fundamental issue in today On-line Social Networks (OSNs) is to give users the ability to control the messages posted on their own private space to avoid that unwanted content is displayed. Up to now OSNs provide little support to this requirement.

To fill the gap, in this paper, we propose a system allowing OSN users to have a direct control on the messages posted on their walls. This is achieved through a flexible rule-based system, that allows users to customize the filtering criteria to be applied to their walls, and a Machine Learning based soft classifier automatically labeling messages in support of content-based filtering. Machine learning techniques such as Support Vector Machine (SVM) is used as text categorization techniques to automatically assign each short text message with in a set of categories based on its content.

VII. MODULES

- Social Network Application
- Post Comments
- STC Implementation
- Filtered Rules Implementation
- Filtered GUI

VIII. IMPLEMENTATION

The software implementation stage involves the transformation of the software technical data package (TDP) into one or more fabricated, integrated, and tested software configuration items that are ready for software acceptance testing. The primary activities of software implementation include the:

- Fabrication of software units to satisfy structural unit specifications.
- Assembly, integration, and testing of software components into a software configuration item.
- Prototyping challenging software components to resolve implementation risks or establish a fabrication proof of concept.
- Dry-run acceptance testing procedures to ensure that the procedures are properly delineated and that the software product (software configuration items (CIs and computing environment) is ready for acceptance testing.

IX. ARCHITECTURE DIAGRAM

A system architecture or systems architecture is the conceptual model that defines the structure, behavior, and more views of a system. An architecture description is a formal description and representation of a system, organized in a way that supports reasoning about the structures and behaviors of the system. System architecture can comprise system components, the externally visible properties of those components, the relationships (e.g. thebehavior) between them.

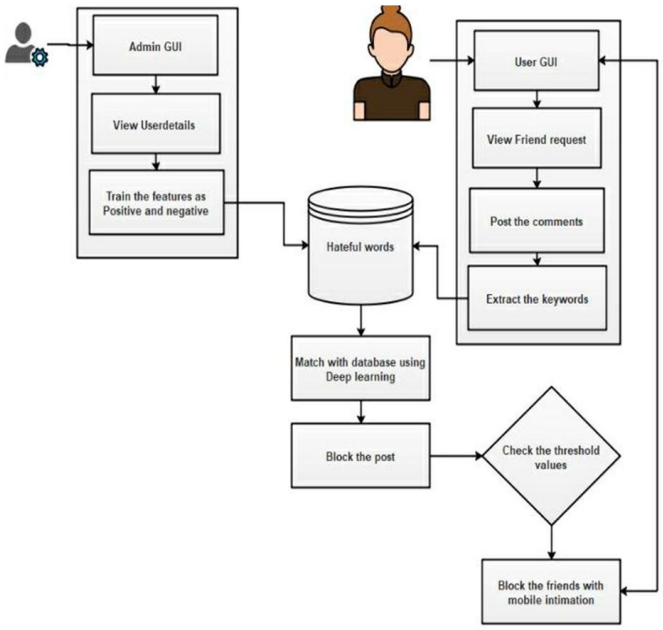

Fig no . 1

X. CONCLUSION

Proposed System provides Filtered wall to OSN users by filtering unwanted messages. Here with message filtration system provides blacklisting mechanism which blocks sender who sends bad messages Depend on trust value. User have to decide threshold trust value (i.e. cut of value) to blacklist person. Threshold value is depending upon the user what threshold value he wants to declare. User has to assign trust value to the people which are present in his friend list. When Sender sends bad messages to receiver, filtered wall get that messages, then classify that message, and then apply machine learning to categories that message as neutral or non-neutral (i.e. Good or Bad)For that system using Machine Learning technique. If the word is neutral system will represent it by 0 and if the word is non-neutral system will represent it as 1 it is called as Text Representation. If message is neutral system will display that message. If message having non-neutral words then system will not display that message simultaneously reduce trust value of the person from which receiver gets that bad message. System will display the good messages of person until he meets threshold value to blacklist that person. This system will not display ugly or bad messages on your wall. It calculates trust value of user who is sending bad messages and blocks that user when he meets the threshold value of blocking. Filtering Rules are customizable by the user. User can have authority to decide what contents should be blocked or displayed on his wall by using Filtering rules. For specify a Filtering rules user profile as well as user social relationship will be considered.

REFERENCES

[1] Gurkhe, D., Pal, N., Bhatia, R.: Effective sentiment analysis of social media datasets using Naive Bayesian classification. Int. J. Comput. Appl. 975(8887), 99 (2014)

[2] Kaur, R., Singh, H., Gupta, G.: Sentimental analysis on Facebook comments using data mining technique. Int. J. Comput. Sci. Mob. Comput. 8(8), 17–21 (2019)

[3] Hasan, M.A., Tajrin, J., Chowdhury, S.A., Alam, F.: Sentiment classification in Bangla textual content: a comparative study. In: 23rd International Conference on Computer and Information Technology (ICCIT), pp. 1–6. IEEE (2020)

[4] Sarkar, K., Bhowmick, M.: Sentiment polarity detection in Bengali tweets using multinomial Naïve Bayes and support vector machines. In: IEEE Calcutta Conference (CALCON), pp. 31–36. IEEE (2017)

[5] Li, D., Qian, J.: Text sentiment analysis based on long short-term memory. In: First IEEE International Conference on Computer Communication and the Internet (ICCCI), pp. 471–475. IEEE (2016)

[6] Hassan, A., Amin, M.R., Al Azad, A.K., Mohammed, N.: Sentiment analysis on Bangla and romanized Bangla text using deep recurrent models. In: International Workshop on Computational Intelligence (IWCI), pp. 51–56. IEEE (2016)

[7] .Elouardighi, A., Maghfour, M., Hammia, H., Aazi, F.Z.: A machine Learning approach for sentiment analysis in the standard or dialectal Arabic Facebook comments. In: 3rd International Conference of Cloud Computing Technologies and Applications (CloudTech), pp. 1–8. IEEE (2017)

[8] Alam, K.T., Hossain, S.M.M., Arefin, M.S.: Developing a framework for analyzing social networks to identify human behaviours. In: 2nd International Conference on Electrical, Computer and Telecommunication Engineering (ICECTE), pp.1–4. IEEE (2016)

[9] Huq, M.R., Ali, A., Rahman, A.: Sentiment analysis on Twitter data using KNN and SVM. Int. J. Adv. Comput. Sci. Appl. 8(6), 19–25 (2017)