

Insightsphere: Social Analytics Command Center

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Abstract:- The Social Media Command Center is a complex program designed to monitor and analyze user activity on various social media platforms. The innovative tool includes sentiment analysis to measure user sentiment and sentiment. One of its main features is the ability to disable unwanted features, allowing you to access content and communications. The system uses sentiment analysis to identify and correct harmful or counterproductive user behavior to create a better and more manageable online environment. This allows the system to distinguish between positive, negative, and neutral emotions. The plug-in feature is a special feature of the Command Center that allows administrators to disable or block user actions based on arbitrary diagnostic results. For example, if the analysis finds that there is no offensive or harmful content, the system can automatically take steps to reduce the impact by removing or reducing the scope of that content. Command Center also offers dashboards and reports that provide deep insights into social media trends, user behavior, and sentiment patterns. This helps organizations make decisions, improve community management, and maintain a better online environment.

Keywords:- Social Media Monitoring, Data Visualization, Sentiment Analysis, KPI Tracking, Predictive Analytics, Multiplatform Integration, Workflow Optimization, Collaboration Tools, Scalability, Real-Time Analytics, Trend Analysis, Social Listening, Reporting Tools.

I. INTRODUCTION

Social media allows people to freely interact with others and provides a variety of ways for marketers to reach and communicate with consumers. Considering the many ways social media affects people and businesses, the authors focus on where they believe the future of social media lies when considering the issues and issues related to commerce [1].

Consumers use digital media to educate themselves about topics, personalities, brands, products, and services, and value various new online information sources initiated, created, and disseminated through social media. The importance of social media in business is growing at a rapid rate. Due to the huge growth in the use of social media, every organization is managing excellent and comprehensive social media platforms or channels in the best way for business growth [2].

Social media has become a part of many people around the world. Businesses also use it to facilitate communication with customers and enjoy the benefits of communication. As social media platforms and users grow, so does the need for businesses to monitor, capture, analyze, and report on the data generated by these platforms. The current paper presents social network analysis (SMA) techniques with online marketing applications. Identify the different stages of the SMA process integrating online marketing strategies, challenges, and opportunities [3].

Today, the relationship between an e-commerce site and a social media site has become more blurred. Most e-commerce sites support logging in with social media sites like Google+, Facebook, and Twitter. The user can also post a link to the online store page of the purchased product on social media.[4].

The social network has gained remarkable attention in the last decade. Accessing social network sites such as Twitter, Facebook LinkedIn, and Google+ through the internet and Web 2.0 technologies has become more affordable. People are becoming more interested in and relying on social networks for information, news, and opinions of other users on diverse subject matters.[5].

II. LITERATURE SURVEY

According to Mayur Wankhade et al.,(2022),the growth of social networking sites has spawned several fields dedicated to obtaining the information needed to analyze these networks and their content. Sentiment analysis focuses on deriving the emotions conveyed by a text from its content. Sentiment analysis is a branch of NLP, and because of its long and illustrious history of public opinion decision-making, there must have been some early works on it [[6].

According to Zufadzli Drus et al., (2019) it has two main methods have been identified for sentiment analysis, which are a machine-learning approach and a lexicon-based approach. The machine learning approach uses algorithms to extract and identify opinions from the data, while the vocabulary-based approach works by counting positive and negative words associated with the data. Researchers have developed a new efficient and accurate model to analyze emotions[7].

Kathy R Fitzpatrick et al., (2022) say that the study is among the first to provide empirical evidence of how companies are using social media analytics to enhance public relations. The findings revealed that although CCOs perceive social media analytics as strategically important to the advancement of public relations, the use of social media data is slowed by challenges associated with building SMA capacity.[8].

Bilal Abu-Salih(2021) et al., say that the emergence of online social media services has made a qualitative leap and brought profound changes to various aspects of human, cultural, intellectual, and social life. Therefore, analyzing the flow of social data content is necessary to enhance business practices, augment brand awareness, develop insights on target markets, detect and identify positive and negative customer sentiments, etc [9].

According to GM Shahariar et al., (2019), if you want to buy products from online sites today without getting scammed, you need a solid and reliable system to see site reviews. There are many sites online that offer opportunities to post reviews, which creates room for paid fake reviews or fake reviews. [10].

III. PROPOSED SYSTEM

In this work, I introduced a system to detect the state of users’ psychological behavior based on user invitations, updates, events, status, etc. and users’ social interactions. Use real social media data as a base. I study the relationship between the psychological state of users and social communication behavior. Use all user tweet content and

social interaction data. I proposed a probabilistic language model that combines the content-based algorithm and the Q-gram technique. By analyzing this pattern, it identifies stressed users. Based on this, the user’s behavior level will be displayed on his account. While the Social Analytics Command Center provides valuable information and features, it is not without its drawbacks. Here are some potential disadvantages associated with such systems:

A. Complex Usage:

Setting up and designing a social media analytics command center can be complex and resource-rich, requiring both social media analytics ability and specialized implementation.

B. Data Protection Issues:

The collection and examination of social media information may raise information protection issues. Guaranteeing compliance with information security directions and getting client assent for information handling is essential.

C. Dependency on Outside APIs:

The usefulness of the Social Analytics Command Center is frequently subordinate to the accessibility and unwavering quality of outside APIs given by social media stages. Changes to these APIs may influence framework execution.

D. Customizable Cautions:

Users can set custom cautions and notices based on particular criteria, such as sudden notices, disposition swings, or events of predefined catchphrases. This permits you to rapidly respond to developing patterns or potential problems.

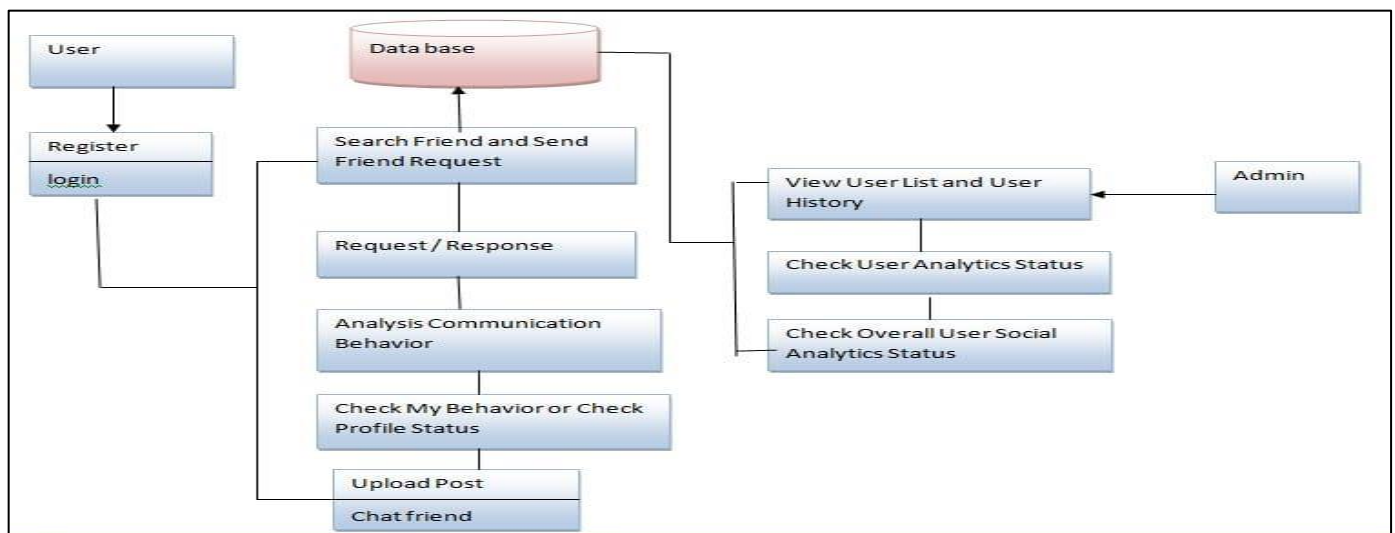


Fig 1: Flow Chart of the Proposed System

IV. EXPLANATION

A social analytics command center with robust sentiment analysis capabilities offers countless benefits for organizations navigating the dynamic social media landscape. Insights from sentiment analysis empower organizations to make informed and informed decisions that

guide the development of effective marketing strategies and help them stay abreast of market trends. Effective community management is achieved when the control center identifies and addresses problems in online communities, promoting a positive user environment.

V. MODULES

In this paper, I have introduced two modules:

A. Admin Module:

The client administration module is a critical component within the command center, providing administrators with the ability to efficiently manage user accounts. This includes tasks such as creating new users, assigning roles, and granting permissions based on specific responsibilities within the system. Furthermore, the configuration settings feature empowers administrators to tailor and personalize the overall settings of the command center. This encompasses the configuration of data sources, parameters for sentiment analysis, and system preferences, allowing for a customized and adaptable user experience.

In terms of security controls, administrators wield essential tools to ensure the protection of sensitive data. They can manage encryption protocols and implement access-control policies to safeguard the integrity of the system. The emphasis on security underscores the commitment to maintaining the confidentiality and privacy of critical information within the command center.

The training and maintenance aspects of the admin module are crucial for the ongoing accuracy and relevance of sentiment analysis. It includes tools for display retraining, system maintenance, and updates to ensure that the sentiment analysis model remains precise and up-to-date. This proactive approach to system maintenance contributes to the reliability and effectiveness of the sentiment analysis capabilities within the command center.

Additionally, administrators benefit from monitoring and reporting features, allowing them to assess the overall health of the command center. They can review system logs, generate reports on user activities, performance metrics, and system utilization. This monitoring and reporting functionality provide administrators with valuable insights, enabling them to make informed decisions, address potential

issues promptly, and optimize the performance of the command center. Overall, the admin module plays a pivotal role in ensuring the seamless functioning, security, and continual improvement of the sentiment analysis command center.

B. User Module:

The dashboard access provides users with a comprehensive platform featuring visualizations like charts and graphs, offering a quick overview of social sentiment. The real-time monitoring feature ensures users stay abreast of the latest sentiment trends, with instant notifications for critical events. Customization options in the user module empower individuals to tailor their view by selecting specific data sources, sentiment categories, and timeframes for analysis, aligning with their unique interests or focus areas. Historical analysis tools enable users to delve into trends and patterns over time, providing deeper insights into audience sentiments. Admin-configured alert notifications keep users informed of significant sentiment changes or mentions requiring attention. The feedback submission feature allows users to contribute to the improvement of the sentiment analysis model over time by providing input on accuracy. Additionally, the user module may offer a competitor comparison functionality, allowing individuals to assess sentiment trends relative to competitors, fostering a deeper understanding of market dynamics. Overall, this comprehensive suite of features ensures a dynamic and user-centric sentiment analysis experience.

VI. RESULT & DISCUSSION

The project successfully delivered a user-friendly sentiment analysis platform with features like real-time monitoring, customizable views, and historical analysis tools. Users can receive instant alerts and submit feedback for continuous improvement. The potential addition of competitor comparison enhances market insights. The robust platform empowers users to gain profound understanding of social sentiments, making it a valuable tool for both individuals and businesses.



Fig 2: Display of the Home Page

The Social Analytics Command Center on the homepage is a centralized hub displaying real-time data and insights from various social media channels. It offers a

comprehensive overview, empowering users to monitor, analyze, and respond effectively to social trends, mentions, and engagement.

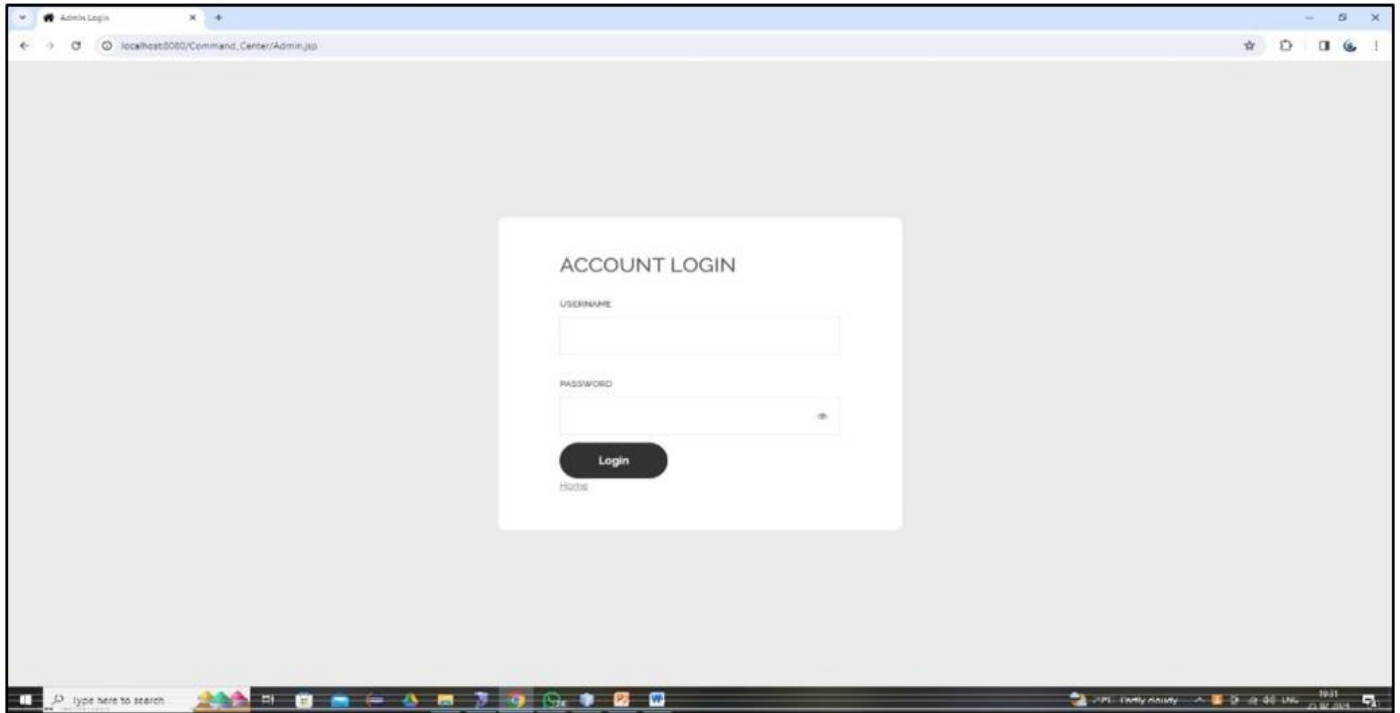


Fig 3: Displays the Admin Login Page

The Admin Login Page for the Social Analytics Command Center ensures secure access to the platform's administrative features. It enables authorized users to manage

settings, permissions, and configurations, ensuring a seamless and controlled environment for monitoring and analyzing social media data.



Fig 4: Admin Home Page

The Admin Home Page of the Social Analytics Command Center serves as the control center for administrators. It provides a user-friendly interface to

configure, customize, and oversee the platform, offering powerful tools to efficiently manage social analytics, insights, and user permissions.

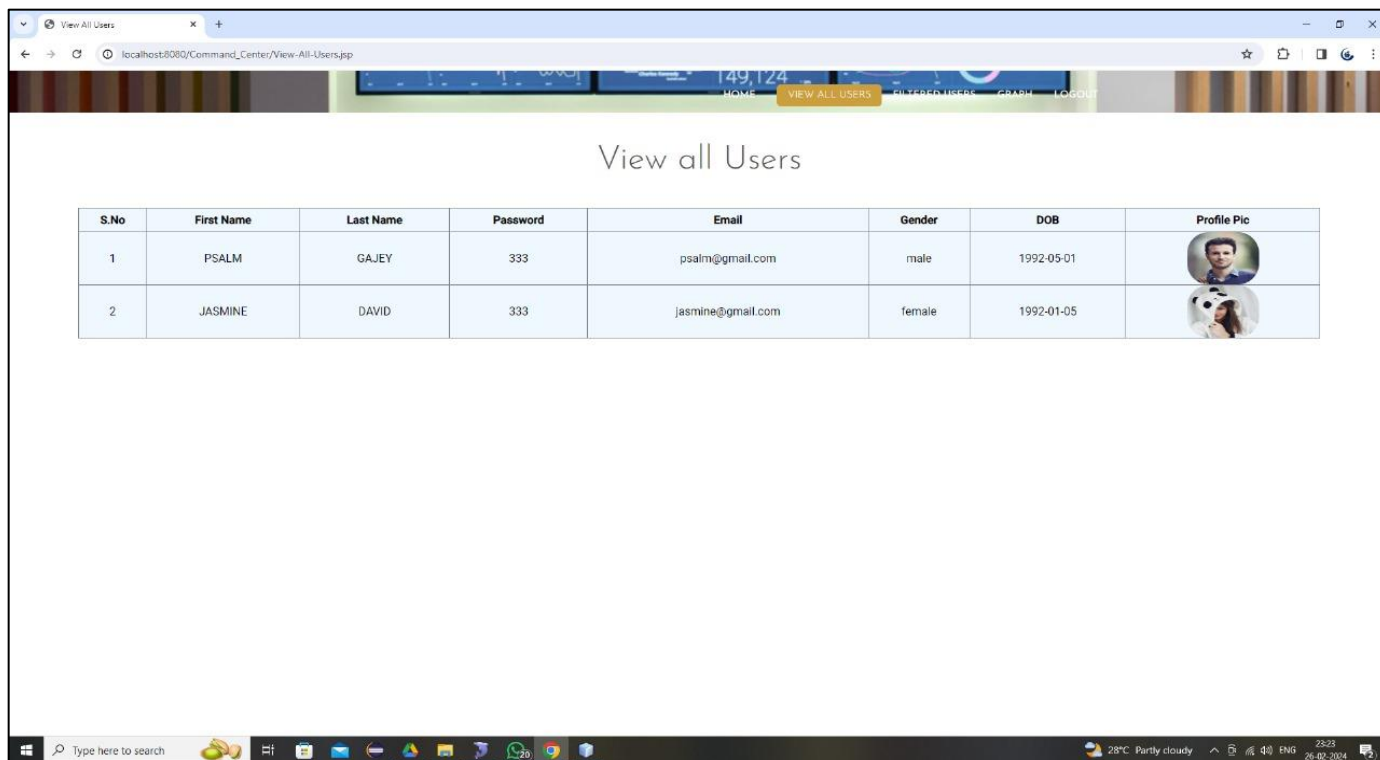


Fig 5: View All Users

The "View All Users" feature in the Social Analytics Command Center provides a comprehensive list of all users with associated roles and permissions. This facilitates

efficient user management, ensuring administrators can monitor, modify, and optimize access for better collaboration and data control.

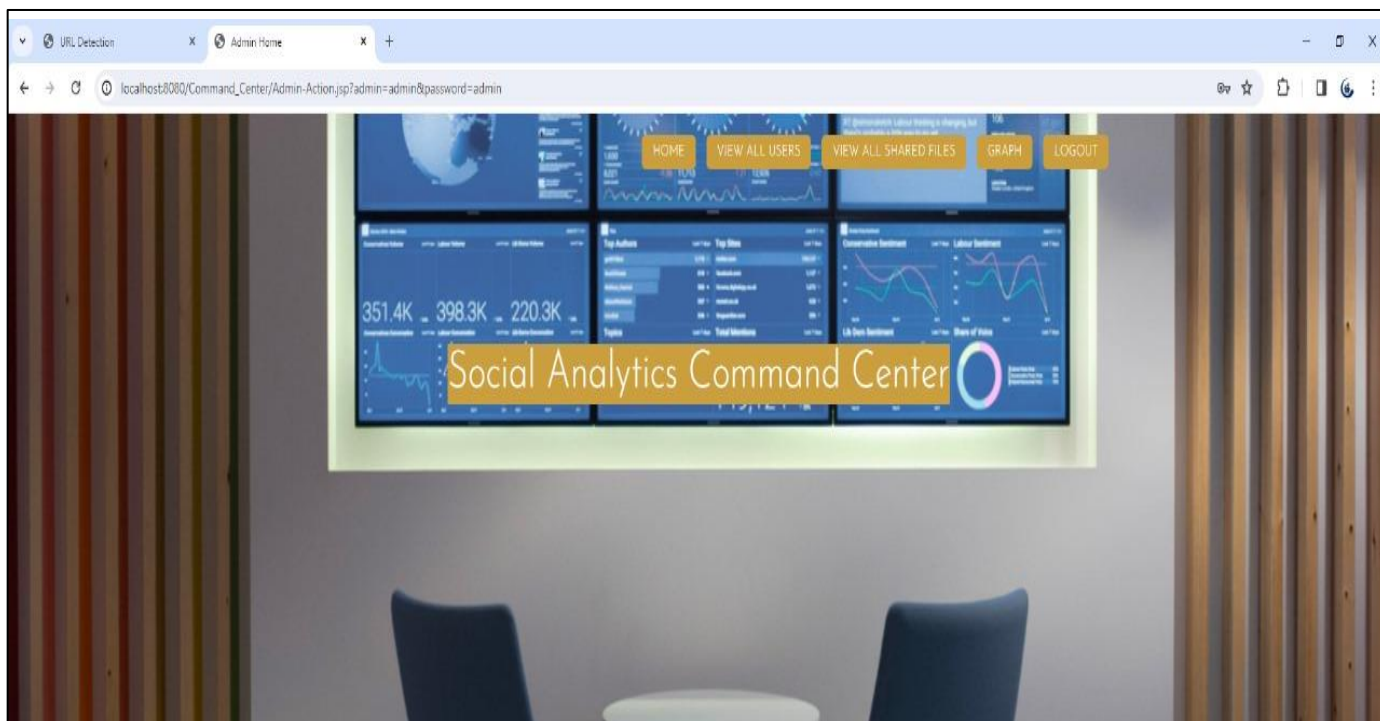


Fig 6: Adminregister Page

The Admin Register Page in the Social Analytics Command Center serves as the gateway for creating new administrator accounts. It ensures a controlled onboarding process, enabling authorized individuals to register securely.

This page plays a crucial role in expanding the administrative team while maintaining authentication, access integrity, and data security.



Fig 7: Chat Window Page

The social analytics command center chat window page provides a real-time communication platform. Users can participate in conversations, share knowledge, and collaborate seamlessly. This interactive feature improves

teamwork, enables quick decision-making, and fosters a dynamic environment for analyzing and responding to social media trends.

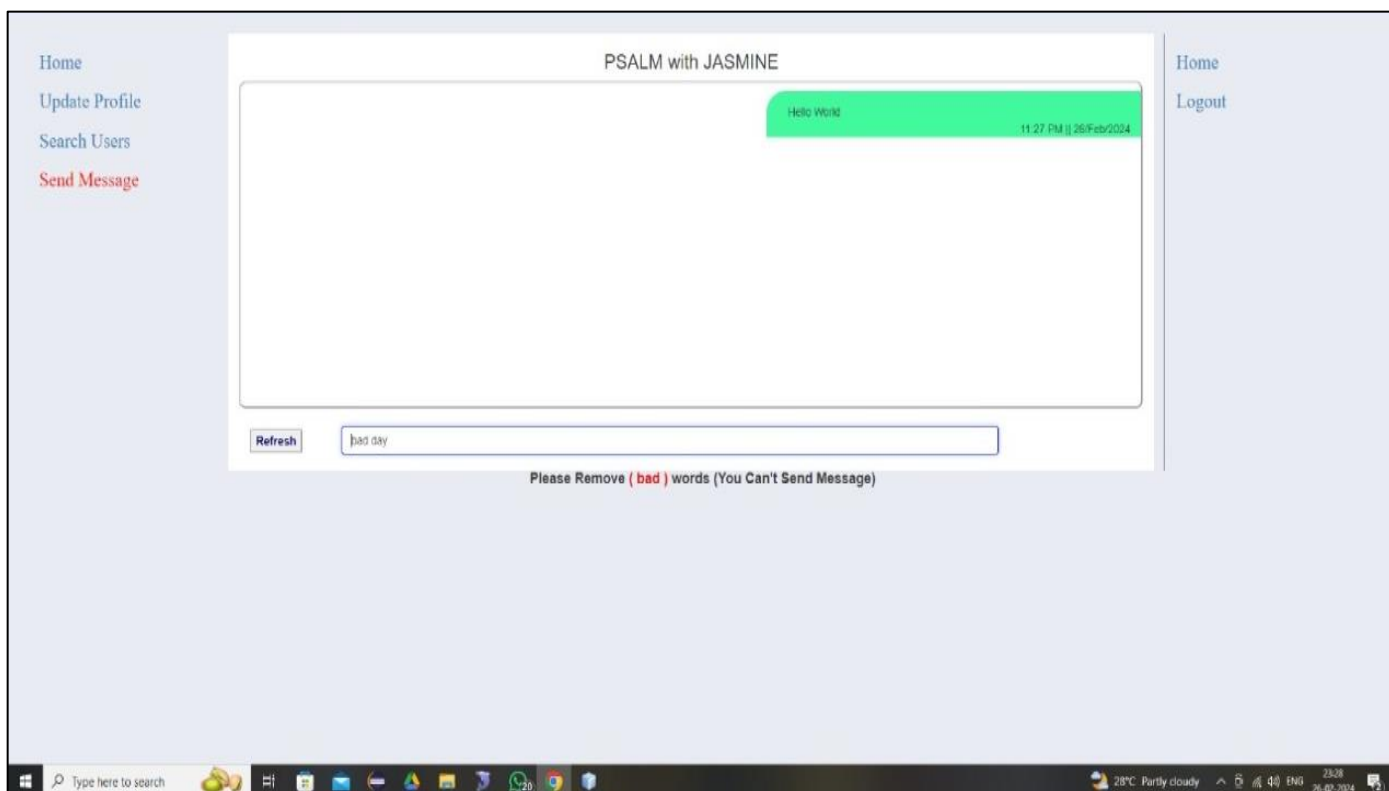


Fig 8: Detect Unwanted Word

The "Detect Unwanted Word" function in the Social Analytics Command Center employs advanced algorithms to identify and flag undesirable language or content within social media data. This proactive tool enhances content

moderation, ensuring a clean and respectful online environment while empowering administrators to manage and address potential issues promptly.

S.No	Sender ID	Sender Name	Receiver Name	Message	Date / Time	Total Attempt	Status	Action
1	1	PSALIA	JASNAJING	Just say	26/Feb/2024 / 11:08 PM	5	Action	Action / Do Action

Fig 9: Views Filtered Users

The "View Filtered Users" feature in the Social Analytics Command Center displays a refined list of users based on applied filters. It streamlines user analysis, allowing administrators to focus on specific demographics or criteria. This enhances precision in monitoring and responding to social media activities, optimizing insights and engagement strategies.

VII. CONCLUSION

The characters of spam issues, and massive and continuous, spam filtering approaches with higher performance are still required to be developed urgently. They proposed a Chinese spam filtering approach with a text classification method based on semantic information.

The characters of spam issues, and massive and continuous, spam filtering approaches with higher performance are still required to be developed urgently. Spam filtering approach with text classification method based on the semantic information. The extraction of semantic information from text was achieved by attaching semantic cannot actions on the words and sentences of it. The result of the experiment conducted on the corpus showed a satisfactory classifying performance on text and indicating enormous potentiality in spam filtering with multiple classes and fewer feature terms.

Spam classification using spam-resilient user-user and email-email similarity features. Using such features, derived from the last user activity, has advantages our setting: it helps generalize extremely sparse spam votes, and it makes it harder for spammers to game the system since they have no access to the private activity information of users. The System that our approach outperforms existing solutions based on text classification and collaborative filtering, and can be naturally combined with them yielding further improvements in classification accuracy.

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