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BEHAVIOUR ANALYSIS FOR MENTALLY AFFTECTED PEOPLE

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ABSTRACT

Today, depression is one of the most common health hazards we see in many people throughout the world. Individuals with symptoms of severe depression will affect all aspects of their lives such as work, home, relationships, etc. An Early diagnosis of depression symptoms may help people to take care of their mental health. Social media channels, such as Facebook, Twitter, and Instagram, have changed our world forever. People are now more connected than ever and are emerging as a kind of digital person. While social media has certainly had a few notable features, corruption is also undeniable. Recent research has shown a correlation between high usage of social networking sites and an increase in depression. The current study aims to exploit machine learning strategies to find a Twitter user depressed based on his network behaviorand tweets. To this end, we have trained and evaluated class classifiers to determine whether a user is depressed or not using features taken from his or her online activities and tweets.

Keywords: NaiveBayes,Python.

I. INTRODUCTION

Depressionis acommon mentalhealthconditionandtheleadingcauseofdisabilityintheworld,whichcanlead to suicide. Every year approximately more than 300 million people are suffering from depression all over the world. Depression can be diagnosed by a face-to-face clinic approach. However, in the early stages of depression, 70% of patients did not want to see a doctor, whose condition may have improved significantly. Recently, there has been a move to use social media data to detect, measure, and track potential disease changes. The proliferation of social media platforms provides a rich opportunity for the development of data available to psychiatrists and researchers, allowing for a more informed and well-equipped mental health field. In addition, the Mysterious emotions that infiltrated social media harm people, leading to depression and other mental illnesses. Mental illness is also known as a high risk of suicide; about 80% of those who try or die by suicide are known to have some form of mental illness. Now-a-days people are more interactive with the social media when compared to person to person. People are sharing their opinions, thoughts, quotes, feelings insocial media. So we are building a machine learning system so that we can use the tweets or quotes which they are sharing on social media and see whether they are depressed or they are normal.

II. LITERATURE SURVEY

ALiteraturesurveyis a very importantstepinthe process ofsoftwaredevelopment. Before buildingthesystem some consideration are taken into account for developing the proposed system. We have to analyze Machine learning and Depression tweets Predicational analysis: With the growth of Social Media online users areable to easilyexpress andsharetheirideas aboutcompanies,products,services,eventsetc. Socompanies werekeento monitor what people were saying about their products in order to get feedback or improve their marketing efforts. Machine Learning has an interesting apps in Social Media Monitoring. It is used to test users opinions and classify them as True, False (Also known as Depression Prediction Analysis tweets). Additionally, it can be used to determine if a post is meaningful or dependent, what the original language of the post is and whether the post was written by a man or a lady. Depression tweets Predictional Analysis is a process of computer-assisted identification and classification of ideas expressed, especially to determine whether an author'sattitude towards a particulartopic,product, etc.true or false.DepressionTweets PredictionAnalysis becomes a popular site for research and analysis of social media, especially with regard to user reviews and tweets. It is a special

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case of digging into the text and often focusing on the diversity of ideas, and although it is often very accurate, it can still be useful.

III. PROBLEMSTATEMENT

Mental illness is the most common overlooked problems in our day to day life. According to the World Health Organization, about20 percent ofchildrenand adolescentsand23% ofthepopulationhaveoneormoremental illnesses, making mental disorders the leading cause of disability worldwide. After all, Depression is one of the most common mental illnesses. More than 30 crore people also known as 4.4% of the world's population is estimated to have depression. Depression may occur due to their personal life problems and also even withtheir professional life like due to work stress, etc. Going each person and asking whether they are feeling good or bad is not possible at every time. All of these facts highlight the need for modern methods of identifyingthose who are suffering or at risk of depression. Since most of the population now-a-days are more involved in social media sites like instagram, twitter, facebook, etc.and sharing their personal thoughts in the form oftweets and quotes , we can use the modern technology and find out whether they are depressed or not.

1. IMPORTANCEOFPROJECT:

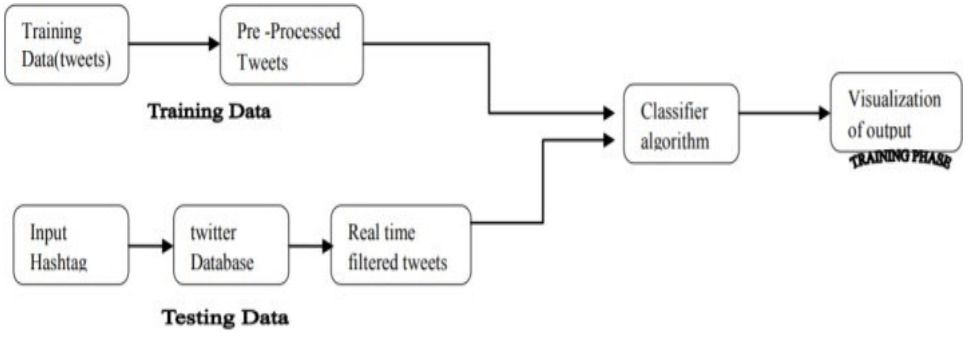
This system defines a binary classification problem as identifying whether a person is depressed, based on his tweets and Twitter profile activity. Different machine learning algorithms are exploited and different feature datasets are explored. Many preprocessing steps are performed, including data preparation and aligning, data labeling, and feature extraction and selection. The ML model has achieved optimal accuracy metric combinations; it converts an extremely nonlinear classification problem into a linearly separable problem. Although the DT model is comprehensive and follows understandable steps, it can fail if exposed to brand-new data. This study can be considered as a step toward building a complete social media-based platform for analyzing and predicting mental and psychological issues and recommending solutions for these users.

2. EXISTINGSYSTEM:

Existing system employed a dictionary-based approach to identify cyber depression on Twitter. In thisresearch, they employed an N-gram feature engineering technique to generate the numeric vectors from the predefined dictionary of depression words. Also used a dictionary-based approach to automatically detect racism on Dutch social media. In this research, the authors relied on the distribution of words in three dictionaries. They sent the generated features to the SVM classifier. Their experimental results obtained a 0.46 F-Score.

3. PROPOSEDSYSTEM:

Theproposed solutionsusedifferent featureengineeringtechniquesandMLalgorithmstodifferentiatecontent as Depression tweetsand predict given text as Depression tweetsor not. Machine Learning can automate process of detecting depression related tweets by training twitter data. Training , testing on dataset and accuracy calculation is done by algorithms. Here in project we are using Naïve Bayes algorithm, since it is a supervised learning algorithm, based on the vision of the Bayes and used to solve classification problems. It is widely used to classify text that includes high-quality training databases. This algorithm is widely used for text classificationand multitasking problems.It is easyand quickto predict a classoftest dataset. It alsoworks well inpredicting multiple classes .Whileindependentthinkingstill exists, the NaiveBayes category performs better compared to other models like logistic regression and requires less training data. It works best if there is a phase input variant compared to numerical variables. With the variability of the numbers, a common distribution is considered (metal curve, which is a strong guess).



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IV. IMPLEMENTATION

MODULESDESCRIPTION

Dataset collection: In this module depression data set is collected from Kaggle website which has depression and normal text and features and o and 1 as labels.

Pre-processing:Inthismoduledatasetistakenasinput andnltklibrary isusedtoconverttext datatocleaned text data by removing stop word applying text cleaning methods.Data is converted to vectorized format.

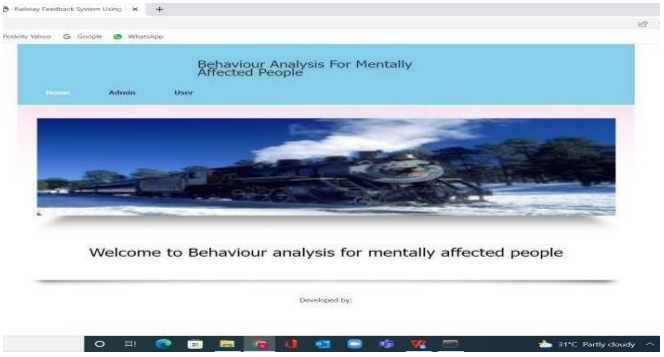
Testingandtraining: Inthisstagecleaneddatasetisdividedintotestingandtrainingdataandtestsetis stored in to trainx as features and trainy as labels.

Initializing Algorithm: In this stage data set features and labels are given as input to algorithm and using fitfunction data is trained.

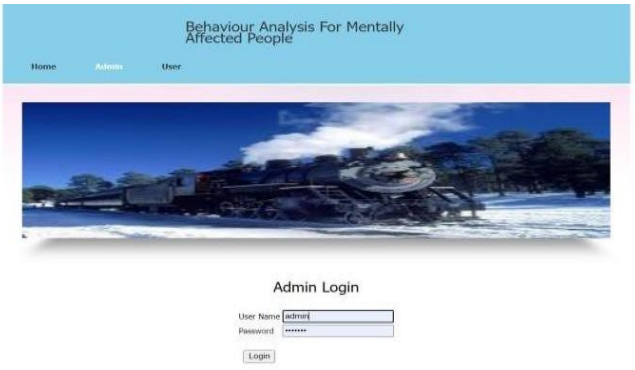
Multiplealgorithms: Trainingisdoneusingmultiplemachinelearningalgorithmsandaccuracyiscalculated.

SCREENS:

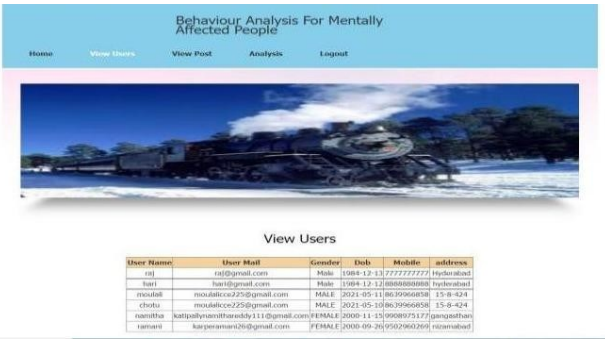
(1) Homepage:Thisisthewelcomepage,whereadminandusers willlogintotheiradminanduserspage respectively.



(2) Adminlogin:Adminsnavigatetoadminloginandhavetogivetheircredentialshere.



(2.1)Adminpage:Afterlogintoadminpage,admincanviewusers,viewpostandviewanalysis. (2.1.1) View Users:



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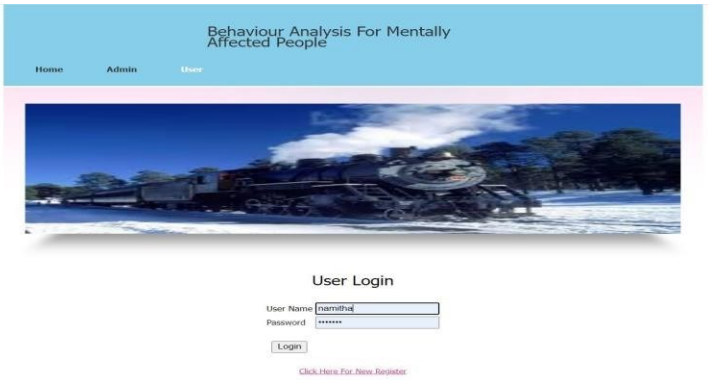
www.ijmece.com
Vol 13, Issue 2, 2025

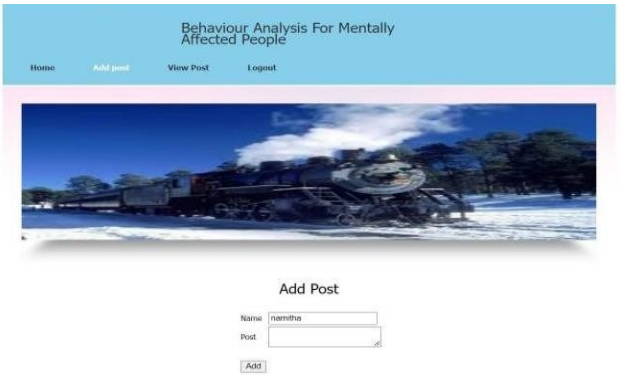
(2.1.2)ViewPost

(2.1.2)ViewAnalysis

(3) Userlogin:Users navigateto userloginandhavetogivetheircredentials here.Ifuser is newuser,thenthey need to register themselves.



(3.1)Userpage:AfterlogintoUserpage,usercanaddpostandviewposts. (3.1.1) Add post:



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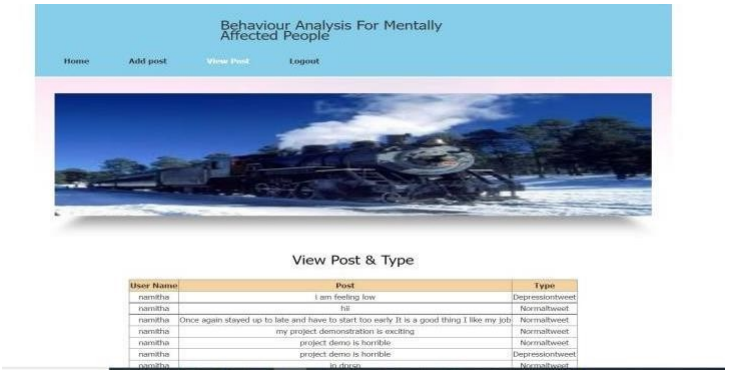
(3.1.2)Viewposts:



V. FUTURE ENHANCEMENT

Therefore, future studies should conduct field studies to support the effects of simulation. Second, a lesson sample was limited to specific fields such as driver behavior, driver age, longitude, latitude, week and day Significant accidents occur in order to expand this and other additional fields can be added. Large machine learning algorithms such as decision tree, retrofit, KNN algorithms are used to reduce time and increase low accuracy. costs. Future studies should include a wide variety of scenarios that will vary from one to the next understanding the consequences of getting used to better behavior.

VI. CONCLUSION

As we know every coin have two sides, Depression tweets Prediction analysis is great but it's a difficult task.The difficulty increases with increase in complexity of opinions expressed. In some of the fields employees, personal problems indirect expressions of opinion are more difficult.

This project defines a ML classification problem as identifying whether a person is depressed, based on his tweets and Twitter profile activity. Different machine learning algorithms are exploited and different feature datasets are explored. Many preprocessing steps are performed, including data preparation and aligning, data labeling, and feature extraction and selection. The ML model has achieved optimal accuracy metric combinations; it converts an extremely nonlinear classification problem into a linearly separable problem. The great thing about social media Depression tweets Prediction analysis is that you're not looking for the needle in the hay. Depression tweets Prediction mining is looking into trends and large numbers of people. It means that you can account for some degree of fuzziness in Depression tweets Prediction classification with the raw amount of data otherwise we will come to know that trends we searching is not popular or important.

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