

# OPINION MINING FOR SOCIAL NETWORKING SITE

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**Abstract**— This system uses opinion mining methodology in order to achieve desired functionality. Opinion Mining for Social Networking Site is a web application. Here the user will post his views related to some subject other users will view this post and will comment on this post. The System takes comments of various users, based on the opinion, system will specify whether the posted topic is good, bad, or worst. User can change his own profile picture and can update his status. These changes can be viewed by various users. We use a database of sentiment based keywords along with positivity or negativity weight in database and then based on these sentiment keywords mined in user comment is ranked. Once the user logins to the system, user can view his own status as well as he can view the topics posted by other users. When the user clicks on a particular topic user can give his own comment about the topic. System will use database and will match the comment with the keywords in database and will rank the topic. User can edit his own profile and can change his profile picture. The role of the admin is to add post and adds keywords in database. This application can be used by users who like to post view about some events that is already held, or can post about the events that is going to be held. This application also works as an advertisement which makes many people aware about the topic posted. This system is also useful for the user's who need review about their new idea. This system is also useful for the user's who need review about any particular event that is posted.

**Index Terms**— Sentiment Analysis,opinion Mining,social networking sites,Machine Learning competitors.

## I Introduction

Content growth in the Internet in recent years has made a huge volume of information available. This information is presented in different formats such as posts, news articles, comments, and reviews. Especially in the automotive, electronics and film sectors, customers have written reviews about products or their features. By collecting and analyzing these reviews, new customers find others' opinion about different features of the product. They can compare the products to each other to find the best one that meets their needs. Moreover, manufacturers will find out strengths and weaknesses of their products or those of their

In this way, manufacturers will solve the reported problems and use the business intelligence behind the analysis for future investments. From the sentiment perspective, there are two kinds of textual information, namely, facts and opinions. While facts are the objective statements about the nature of a product, opinions describe attitudes, appraisals, and emotions regarding a product, service, topic, or an issue. Although the majority of research focuses on building applications around facts, the recent trend in the area of text mining has been focused on building applications around opinions

Sentiment analysis is an interdisciplinary field that crosses natural

language processing, artificial intelligence, and text mining. Since most opinions are available in the text format and its processing is easier than other formats, sentiment analysis has emerged as a subfield of text mining [3]. It generally recognizes opinions of people expressed in text. The opinions could be judgments, evaluations, affective (or emotional) states, beliefs, or wishes. Sentiment analysis appeared in the literature in 1990 for the first time and then it became a major research topic in 2000. Classifying the polarity of a given text as positive or negative is the basic task of sentiment analysis. Due to its many aspects it is often referred to with different names such as opinion mining, sentiment classification, sentiment analysis, and sentiment extraction. It is widely believed that Sentiment analysis is needed and useful. It is also widely accepted that extracting sentiment from text is a hard semantic problem even for human beings. Additionally, sentiment analysis is domain specific, therefore the polarity of some terms depends on the context in which they are used. For example, while “small” for “size” as a feature in the electronic products is positive, in agricultural products such as fruit it has a negative polarity. Sentiment analysis is used in different domains such as shopping, entertainment, politics, education, marketing, and research and development. This paper focuses on sentiment classification in social domains.

## 2 Literature survey

2.1.1 A systematic review was undertaken using 6 steps guidelines for conducting a systematic literature review in management [15]. First, we start by defining the research question. Then determine the required characteristic for the study. Continue by retrieving potentially relevant literature and selecting pertinent literature. We then synthesize relevant information from the literature and the final step is reporting the result of the review.

**2.1.2 To provide an overview of the review, the following research question was addressed:** RQ1: What is the method used in

sentiment analysis of social media?

RQ2: What is the type of social media platform used to applied sentiment analysis?

RQ3: What is the application context of sentiment analysis in social media?

### 2.1.3 Retrieving and selecting pertinent literature

#### Implementation Study

In existing system user use to search by using keyboard typing, it takes lot of times to search. In recent times only in the Voice Assistants we can experience the major changes, the way user interacts and the experience of user. We are already using them for many tasks like switching on/off lights, playing music through streaming apps like Wynk Music, Spotify etc., This is the new method of interacting with the technical devices makes lexical communication as a new ally to this technology

The review utilizing five reputable and credible online databases that published literature covering information and computer science area. Search strings keywords used for all five online databases is “Sentiment analysis, social media, Facebook, Twitter”. The total articles identified from the database search is 307 articles. 34 articles identified from Emerald Insight, 242 results identified from science direct, 24 results from Association for computing machinery (ACM), 45 articles from Scopus and 45 articles identified from IEEE.

Then the screening of papers is conducted based on the inclusion and exclusion criteria and the screening resulted in 85 articles. Consequently, the screening involved reading the full texts and analysing each article and we obtain 24 finalized articles.

#### 2.1.4 Synthesizing the literature

The studies were published between 2015 to July 2020. There is a total of 24 articles selected that suits the purpose of this review. The data from the paper is extracted and the primary study findings are analysed and integrated

### 3 Implementation Study

Existing system of system of project management is **manual**. Project coordinator or guide gives task for student manually. Student complete the work which is given by coordinator or guide and submits manually, in this system all work is done by manually so it can take more time to complete project related work.

#### 3.1 proposed methodology

Proposed System means the assembly of an operational group of computer programs that will perform, without modification, a significant portion of the functional requirements contained in this RFP. The Proposed System should include system interfaces and conversion tools as well as Contractor supplied or recommended third party software products required to properly design, develop, test, train, implement, interface, tune, and operate the Proposed Solution. The Proposed System should include document management, workflow, rules engine, claims management, risk management analytics engine, and a customer relationship management functionality.

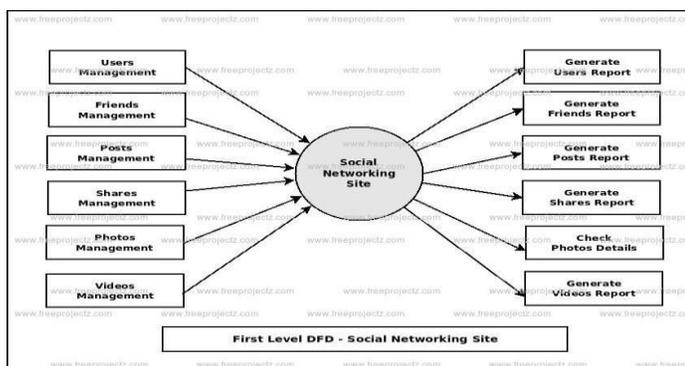


Fig 1: - flow of proposed system

#### 3.2 proposed Algorithm SVM ALGORITHM

In classification tasks a discriminant machine learning technique aims at finding, based on an *independent and identically distributed (iid)* training dataset, a discriminant function that can correctly predict labels for newly acquired instances.

Unlike generative machine learning approaches,

which require computations of conditional probability distributions, a discriminant classification function takes a data point  $x$  and assigns it to one of the different classes that are a part of the classification task. Less powerful than generative approaches, which are mostly used when prediction involves outlier detection, discriminant approaches require fewer computational resources and less training data, especially for a multidimensional feature space and when only posterior probabilities are needed. From a geometric perspective, learning a classifier is equivalent to finding the equation for a multidimensional surface that best separates the different classes in the feature space.

SVM is a discriminant technique, and, because it solves the convex optimization problem analytically, it always returns the same optimal hyperplane parameter—in contrast to *genetic algorithms (GAs)* or *perceptrons*, both of which are widely used for classification in machine learning. For perceptrons, solutions are highly dependent on the initialization and termination criteria. For a specific kernel that transforms the data from the input space to the feature space, training returns uniquely defined SVM model parameters for a given training set, whereas the perceptron and GA classifier models are different each time training is initialized. The aim of GAs and perceptrons is only to minimize error during training, which will translate into several hyperplanes' meeting this requirement.

### 4 Results and Evolution Metrics



Fig 2: \_ home screen

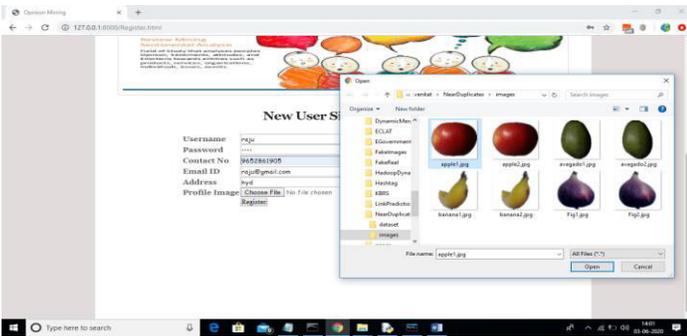


Fig 3: registration page

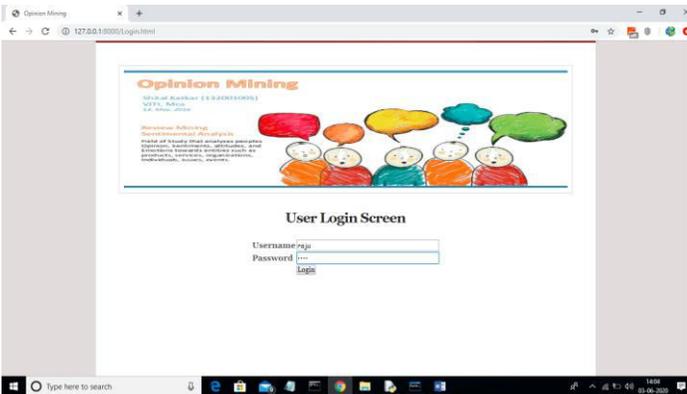


Fig 4: \_ login page

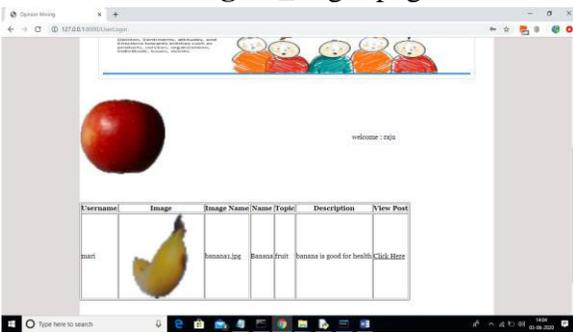


Fig 5: \_ In above HomePage screen we can see raju user profile image and his name and below we can see all topics posted by different users. Now click on ‘status update’ link to add status

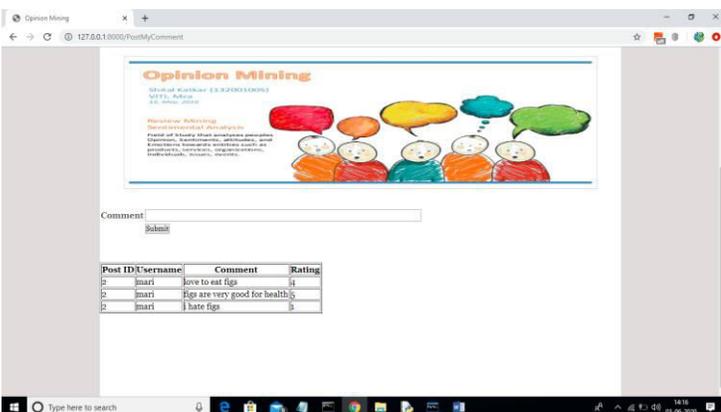


Fig 6:- In above screen mari wrote some

comments on raju post and then using SVM classifier we rate each comment.

### 7. Conclusion

In our paper we have implemented many things compared to other assistants. Now a days it is very useful in human life because it is a hands-free application. It is a very simple application. As well as it is used in a business field also for example in laboratory, the person wears gloves and body suits for their safety purpose so it is difficult to type, through voice assistant they can get any information so that their work becomes easy. Voice assistants are useful in many fields such as education, daily life application, home appliances etc. and voice assistant is also useful for the illiterate people they can get any information just by saying to the assistant, luxury is available for people, thanks to AI based voice assistants.

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