

# Evaluate the Positive Aspects of Student Learning Experience in Social Media Using Naive Bayers Algorithm



## Engineering

**KEYWORDS :** data mining, sentiment analysis, multi label naive bayers algorithm

**Sheetal R. Patodiya**

ME Student, Department of Computer Science & Engineering, GECG Sector-28, Gandhinagar

**Prof. Namrata Shroff**

Assistant Professor, Department of Computer Science & Engineering, GECG Sector-28, Gandhinagar

### ABSTRACT

*Student's informal conversations on social media (e.g twitter, Facebook and other social media sites) show the educational experiences, opinions, feelings and concern about the learning process. The data extraction from the social media provide valuable knowledge to inform student learning experience about how they positively taking the education and what are the benefits they gain from the education and in which area they are most focusing. My research focuses on the discover positive view of the students (using text and image and multiple languages ) find the most accurate result using or improving multi-label naive bayers classification in which attribute will be divided into multiple categories. Furthermore it is assumed that an appropriate algorithm provides better efficiency and more accurate results.*

### INTRODUCTION

Sentiment analysis is a type of natural language processing for tracking the mood of the public about a particular product or topic. Sentiment analysis, which is also called opinion mining, involves in building a system to collect and examine opinions about the product made in blog posts, comments, reviews or tweets. Sentiment analysis can be useful in several ways. For example, in marketing it helps in judging the success of an ad campaign or new product launch, determine which versions of a product or service are popular and even identify which demographics like or dislike particular features

### LEVELS OF ANALYSIS

In general, sentiment analysis has been investigated mainly at three levels:

- Document level:**

The task at this level is to classify whether a whole opinion document expresses a positive or negative sentiment. For example, given a product review, the system determines whether the review expresses an overall positive or negative opinion about the product. This task is commonly known as document-level sentiment classification.

- Sentence level:**

The task at this level goes to the sentences and determines whether each sentence expressed a positive, negative, or neutral opinion. Neutral usually means no opinion. This level of analysis is closely related to subjectivity classification which distinguishes sentences (called objective sentences) that express factual information from sentences (called subjective sentences) that express subjective views and opinions.

- Entity and Aspect level:**

Both the document level and the sentence level analyses do not discover what exactly people liked and did not like. Aspect level performs finer-grained analysis. Aspect level was earlier called feature level ( feature-based opinion mining and summarization)

### OBJECTIVES

The Data extraction from social media provide

- How they positively taking education
- What are the benefits they get from education?

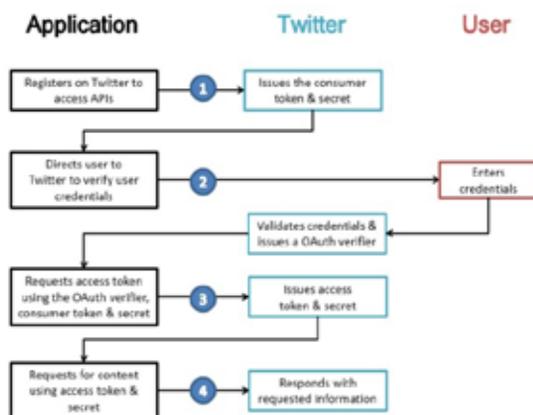
Multi-label algorithm will easily classify the all categories and it is easy to analyze students' opinion.

### DATA COLLECTION METHOD

Step 1: Collect review from internet using web scrapping (j java jsoup API) and Twitter Oauth API. Jsoup work on HTML tag And Oauth work on Rest API of java

REST APIs are based on the REST architecture2 now popularly used for designing web APIs. These APIs use the pull strategy for data retrieval. To collect information a user must explicitly request it.

Streaming APIs provides a continuous stream of public information from Twitter. These APIs use the push strategy for data retrieval. Once a request for information is made, the Streaming APIs provide a continuous stream of updates with no further input from the user



**Figure 1: Data Collection from Twitter**

### Step 2: There are different form for data retrieve

From jsoup api data will be store in html file and then it will be store my sql database. From streaming API data will be in JSON file. So json data will be retrieve and store in database

### Step 3: Preprocessing of data

- 1) Convert sentences into lowercase.
- 2) Stop word remove like (the, a, an, between )
- 3) Stemming – Removing any prefixes hiding
- 4) Removing extra character like @, #, % etc
- 5) Abbreviation like clg ,awsm will convert into college and awesome etc.
- 6) Remove all URL

