PROJECT SYNOPSIS

Subject/ Sub. Code: Minor Project **(**IS6C06) **Section:** A **Credits:** 02
Batch No: A17 **Date:** 05/05/2022

USN	Name	Email id	Mobile No.
4NI19IS058	Nithyashree Arunachalam	4ni19is058_a@nie.ac.in	9650070842
4NI19IS062	Pradyoth P	4ni19is062_a@nie.ac.in	9686180721
4NI19IS086	Shashank BU	4ni19is086_a@nie.ac.in	6366097398
4NI19IS106	Tejasvini SJ	4ni19is106_a@nie.ac.in	9901573214

Project Title: Schmaltz Surveyor – Sentimental Analysis of Social Media
Type of Project: Application of Machine Learning

Objective: 1) Creation of the Dataset from a Social Media Website i.e. Twitter.
2) Performing Analysis on the Dataset created using Natural Language Processing (NLP).
3) Predict the Sentiments expressed by Users in their Social Media content using Support Vector Machine (SVM).

Brief description: Social media has gained immense popularity and has become a major global platform to stay connected as well as express opinions. A huge amount of content is created on various topics and comments are posted on these platforms daily. The feedback received on a certain piece of content can be either negative or positive. Other than this, receiving negative feedback, on various occasions might affect the mental health of the content creators and, in some cases, might also lead to cyber bullying. Social media is a necessity in today's time to stay connected, informed and relevant and therefore such issues must be tackled.

Sentimental Analysis (also known as Opinion Mining in this case) reads people's sentiments or emotions towards particular things or topics. Sentiment analysis is a machine learning tool that will help analyse and categorize the texts (written content and comments) as positive or negative. Sentiments cannot be directly predicted by analysing the text and therefore the texts are vectorised or converted into numeric values. The text is converted using vectorisation methods in NLP (Natural language Processing) such as Bag of Words or TF-IDF(Term Frequency–Inverse Document Frequency). This data is then put through machine learning algorithms such as Support Vector Machine or Logistic Regression. Based on the result after using these methods, the most accurate machine learning model is selected. Python would be the programming language across the whole project.

The number of positive or negative texts and comments can be used to analyse people's reception or opinion on what particular piece of content is getting. Further, it can also be used by social media platforms to detect negative comments and delete them or classify content based on the number of positive or negative comments.

Software Requirements: Jupyter Notebook, Python 3.10, NumPy, Pandas.
Hardware Requirements: Processor: 5th gen Intel Core i5 or Higher
Memory: 4 GB RAM or Above

Internal Guide
Name : Mrs. Nandini BM

Designation : Assistant Professor

Department : Information Science and Engineering

Remarks(if any) by the guide:

Signature