Architecture:

facebook status prediction

s.nitish raj

Contents

1. Abstract

Many teenagers go through a difficult adolescence period, which can lead to depression. It's usually linked to the emotional and socioeconomic pressures they're

under. This can lead to dangerous and violent conduct, as well as substance misuse and self-harm. Young people use social media to stay in touch with friends, teachers, family, and other members of their peer group. As a result, it can be utilized as an efficient instrument for disseminating information to those young people who are affected. So, here we need identify the emotional quotient of young people through their Facebook posts

2. Introduction

3 Why this architecture Document?

> The purpose of this document is to present a detailed description of Facebook status prediction. It will explain the purpose and features of the system, the interfaces of the system, what the system will do, the constraints under which it must operate, and how the system will react to external stimuli. This document is intended for both the stakeholders and the developers of the system and will be proposed to the higher management for its approval

the main objective of the project is To detect the emotion of people who are emotionally weak and also Many teenagers who go through a difficult adolescence period, which can lead to depression from their Facebook status, and try to help them to cope with the problem they are facing in their life this leads to less suicide and crimes in the country. The solution proposed here is Facebook status emotion detection based on the Facebook status of people can be implemented to perform above mention use case this Facebook status emotion detection system directly filters out the people who are facing difficulties in their adolescence period, which can lead to depression and this system will directly notify their parents about the difficulties that their children are facing or if the people who are committing a crime it will directly notify this to the nearby police station this can reduce the overall suicide and crimes in the country

4. Scope

This software system will be a Web application This system will be designed to detect the emotion at the earliest for better suicide prevention, improved interventions, and more efficient mental health resource allocation using the previous status of the people available. More specifically, Early detection of any preventable sad and depressed emotion is important for better management. This system is designed to predict the status of young people's emotion states such as fear, anger, joy, and sad, etc..

5. Constraints

We will only be selecting a few of the emotions people will face and according to problem statement.

6. Risks

Document specific risks that have been identified or that should be considered.

7. Out of Scope

Delineate specific activities, capabilities, and items that are out of scope for the project.

8.Technical specifications

2.1 Dataset

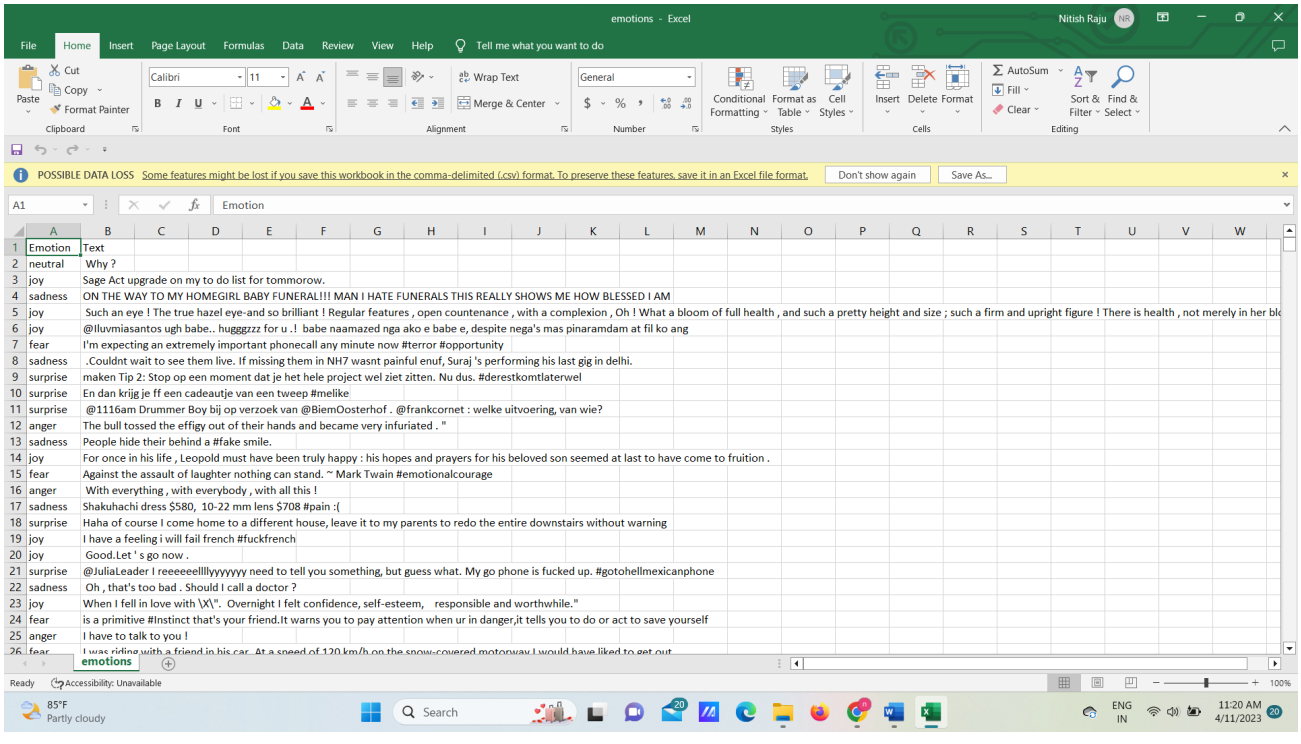
status text	**emotion/labels**
please don't beat me	fear
I do not want to live this life anymore without you	sadness
I am playing games on ground	joy
I will kill you	anger

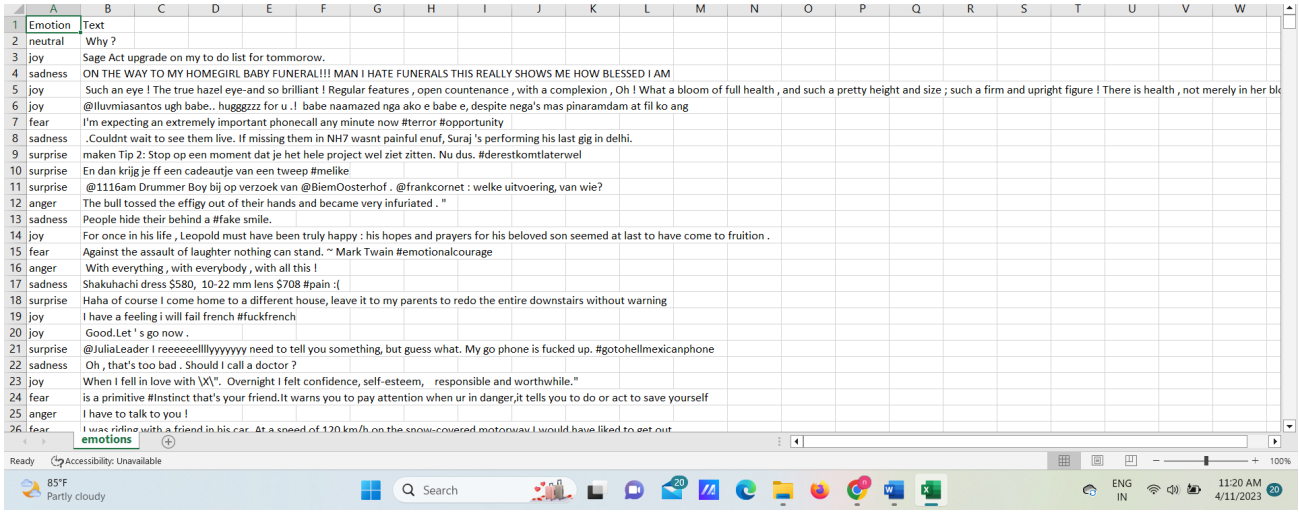
facebook status prediction dataset overview:

this dataset contains two columns one is a test and another one is emotion in the text column we have around 45000 rows every roe contains the emotional status text of people that previously posted on social networking apps and the second column contains an equal

number of, rows contained in the first column and every row contain label for the text like joy, fear, sadness,disgust, anger,love,surprise

Data in CSV file:





9.Input schema

Feature	LABEL
test	EMOTION

i love you	LOVE

10.Predicting emotion

- The system displays the enter the text of the status of the user
- The User enters the emotional text
- The user presses the predict button information.
- The system should be able to predict

this will predict the emotion from the text used is given.

11.Logging

We should be able to log every activity done by the user

- The System identifies at what step logging required
- The System should be able to log each and every system flow.
- Developers can choose logging methods.You can choose database logging/ File logging as well.
- System should not be hung even after using so many loggings. Logging just because we can easily debug issues so logging is mandatory to do.

12. Database

System needs to store every request into the database and we need to store it in such a way that it is easy to retrain the model as well.

The User gives required information.The system stores each and every data given by the user or received on request to the database. Database you can choose your own choice whether MongoDB/ MySQL.

13.Deployment

1. AWS beanstalk

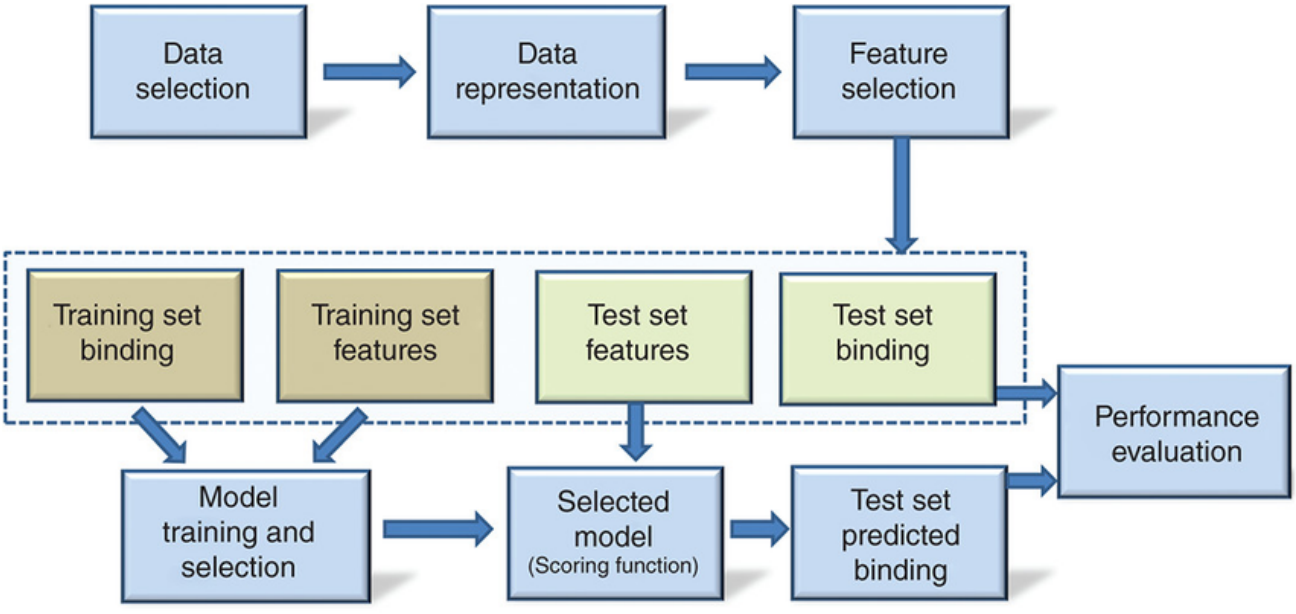
14.Technology stack

Front End	HTML/CSS
Backend	Python
Database	MongoDB/MySql
Deployment	AWS

15. Proposed Solution

Based on the actual research paper, if we are using the history of Facebook status to predict the emotion of the people in early stages of depression. suggested Choosing an appropriate machine learning algorithm for the task of status prediction, such as a decision tree, a logistic regression, or a neural network. Train the model on the preprocessed and engineered data using a suitable training and validation strategy. but after trying a bunch of different machine learning algorithms that logistic regression is giving more scores for the problem statement I am trying to solve .so I choose logistic regression and convert that into pkl file.

16. Model training/validation workflow



17.User I/O workflow