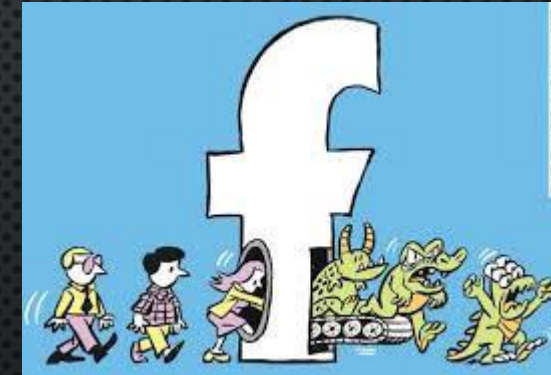


# TOXIC COMMENTS CLASSIFICATION FOR SOCIAL MEDIA FLASK APP



TEAM DEEP BLUE AI MAHE DUBAI  
MEMBERS

GIRISH KUMAR MARPALLY  
MOHAMED AFSAL MOHAMED  
KAUSHIK KRISHNA MOHAN  
MOHAMMED ABDUL QUADIR





# TOXICITY??

THE QUALITY OF BEING VERY HARMFUL OR UNPLEASANT IN A PERVASIVE OR INSIDIOUS WAY.

CYBERBULLYING IS A MAJOR SOCIETAL PROBLEM THAT CAN LEAD TO TEEN SUICIDES

TOXIC COMMENT CLASSIFIER HELPS TO FILTER OUT TOXIC WORDS TO MAKE ONLINE WORLD A SAFER AND MORE HARMONIOUS PLACE



### **Artificial Intelligence**

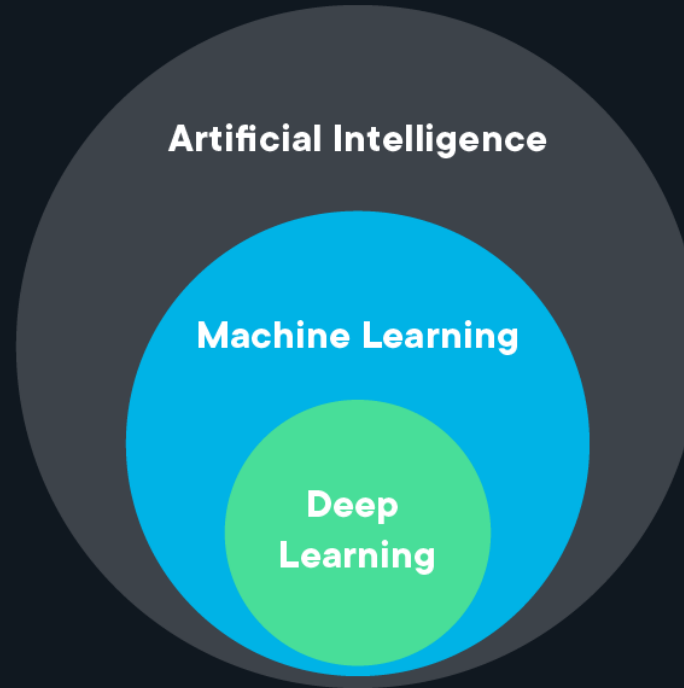
A science devoted to making machines think and act like humans.

### **Machine Learning**

Focuses on enabling computers to perform tasks without explicit programming.

### **Deep Learning**

A subset of machine learning based on artificial neural networks.



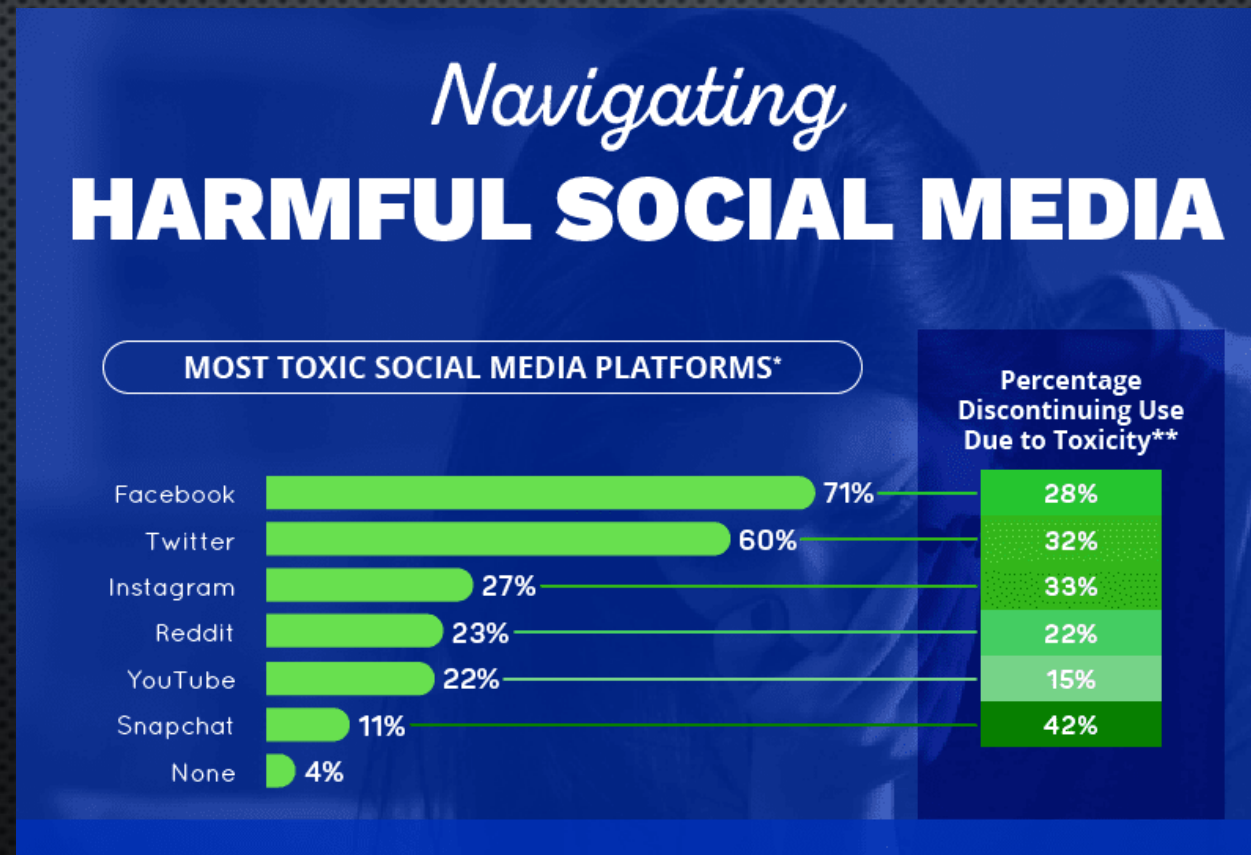
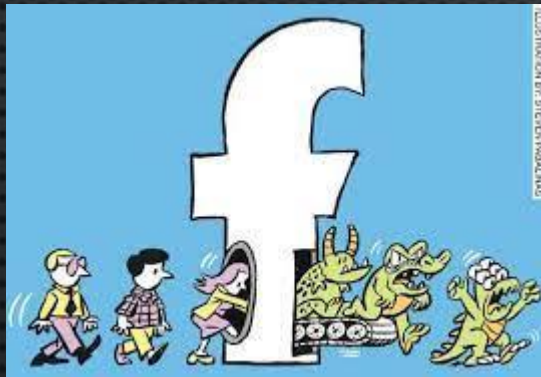
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**NATURAL LANGUAGE PROCESSING (NLP) USES ALGORITHMS TO UNDERSTAND AND MANIPULATE HUMAN LANGUAGE. THIS TECHNOLOGY IS ONE OF THE MOST BROADLY APPLIED AREAS OF MACHINE LEARNING. AS AI CONTINUES TO EXPAND, SO WILL THE DEMAND FOR PROFESSIONALS SKILLED AT BUILDING MODELS THAT ANALYSE SPEECH AND LANGUAGE, UNCOVER CONTEXTUAL PATTERNS, AND PRODUCE INSIGHTS FROM TEXT AND AUDIO.**



# APPLICATIONS

SOCIAL MEDIA IS TOXIC BECAUSE IT IS ADDICTIVE BY DESIGN. ALSO, IT IS OFTEN CALLED TOXIC BECAUSE PLATFORMS SPREAD DISINFORMATION AND THEY ENCOURAGE THEIR USERS TO ENGAGE WITH THESE FAKE NEWS MORE THAN WITH FACT CHECKED 'REAL' NEWS.





**THE TOXIC COMMENTS CLASSIFICATION APP COULD VERIFY IF THE COMMENTS ARE TOXIC OR NOT.**

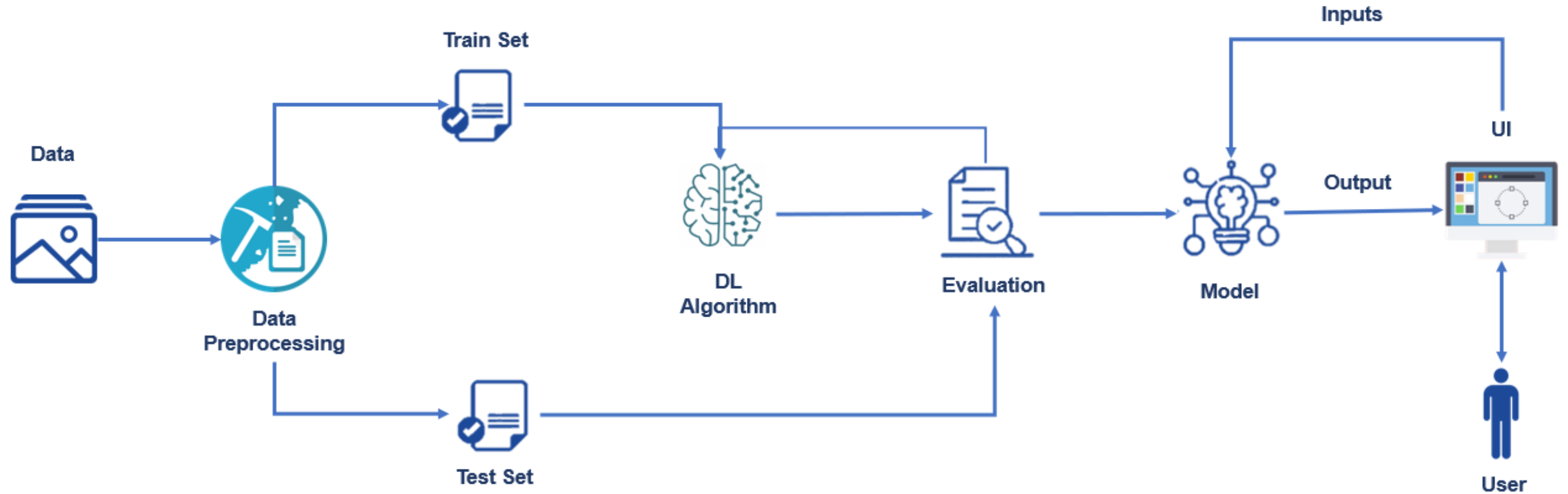
**IN SOCIAL MEDIA USERS FIND MANY TOXIC COMMENTS AND THAT DISTURBS THEIR EXPERIENCE ON SOCIAL MEDIA, AND EVENTUALLY MANY EVEN END UP DISCONTINUING SOCIAL MEDIA ALTOGETHER.**

**SOCIAL MEDIA NEED NOT BE A BAD THING AS IT HAS DONE MANY GOOD THINGS AND HAS WIDE RANGE OF APPLICATIONS THAT BENEFIT THE WORLD, CONNECTING PEOPLE.**

**THE COMMENTS THAT ARE REPORTED BY THE USER AS HATE, INSULT, TOXIC, ETC COULD BE VERIFIED BY THE ALGORITHM AND TAKE NECESSARY ACTION TO REMOVE SUCH COMMENTS FROM SOCIAL MEDIA TO MAKE IT A FRIENDLY AND CONSTRUCTIVE ENVIRONMENT.**



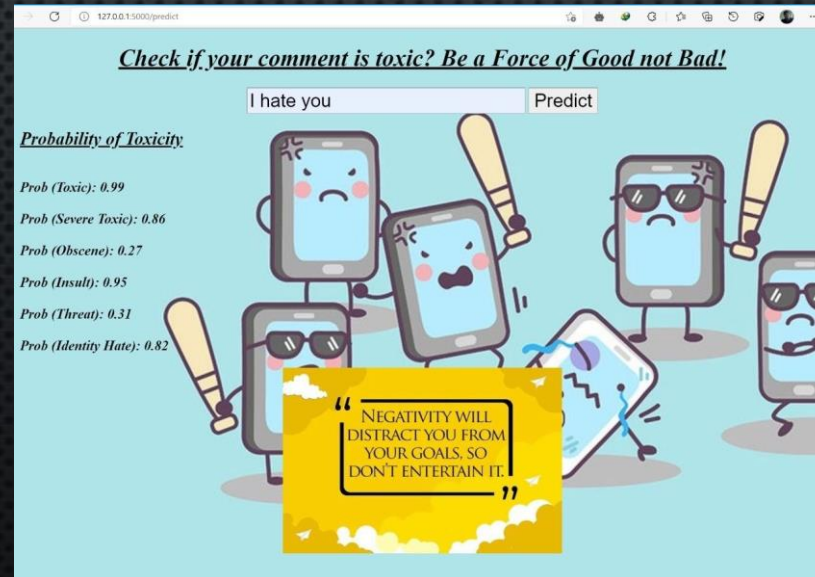
# FUNCTIONING OF THE TOXIC COMMENTS CLASSIFICATION APP





# STEPS TAKEN TO BUILD THE APP

- 1.DOWNLOAD THE DATASET.
- 2.PRE-PROCESS THE TEXTUAL DATA.
- 3.CLASSIFY THE DATASET INTO TRAIN AND TEST SETS.
- 4.ADD THE NEURAL NETWORK LAYERS.
- 5.LOAD THE TRAINED DATA AND FIT THE MODEL.  
TEST THE MODEL.
- 6.SAVE THE MODEL AND ITS DEPENDENCIES.
- 7.BUILD A WEB APPLICATION USING FLASK THAT INTEGRATES WITH THE MODEL BUILT.





SCREENSHOTS

FLASK APP THAT OUTPUTS PROBABILITY THAT A COMMENT FALLS UNDER VARIOUS CATEGORIES OF TOXICITY

127.0.0.1:5000/predict

Check if your comment is toxic? Be a Force of Good not Bad!

your'e fine

Predict

Probability of Toxicity:

Prob (Toxic): 0.22

Prob (Severe Toxic): 0.32

Prob (Obscene): 0.11

Prob (Insult): 0.09

Prob (Threat): 0.18

Prob (Identity Hate): 0.07

NEGATIVITY WILL  
DISTRACT YOU FROM  
YOUR GOALS, SO  
DON'T ENTERTAIN IT.

Illustration of several smartphone characters with faces, some holding baseball bats, and one being broken.

127.0.0.1:5000/predict

Check if your comment is toxic? Be a Force of Good not Bad!

kill yourself

Predict

Probability of Toxicity:

Prob (Toxic): 0.99

Prob (Severe Toxic): 0.87

Prob (Obscene): 0.67

Prob (Insult): 0.58

Prob (Threat): 0.98

Prob (Identity Hate): 0.24

NEGATIVITY WILL  
DISTRACT YOU FROM  
YOUR GOALS, SO  
DON'T ENTERTAIN IT.

Illustration of several smartphone characters with faces, some holding baseball bats, and one being broken.



**-THANK YOU-**

