# North East University Bangladesh

# Department of Computer Science & Engineering

Machine Learning Project Proposal

On

Twitter-Sentiment-Analysis ML project

#### **Submitted to:**

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# Submitted by:

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**Deadline:** 18 Apr. 23

**Project Title:** Twitter-Sentiment-Analysis ML project

## **Project Member:**

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**Objective:** The goal of this project is to build a machine learning model that can accurately predict the sentiment (positive, negative, or neutral) of tweets related to a particular topic. The model will be trained using a dataset of labeled tweets and deployed as a web application that allows users to enter a tweet and get back the predicted sentiment.

### Methodology:

- Data Collection
  - o Twitter Tweet
- Data Preprocessing
  - Clean the data by removing stop words, special characters, URLs, mentions, and hashtags.
- Feature Extraction
  - Use techniques such as TF-IDF, or Word Embeddings to create feature vectors.
- Model Selection and Training
  - o Machine learning algorithms such as Naive Bayes, Logistic Regression, SVM, or Neural Networks.
- Model Evaluation
  - o Evaluation using metrics such as accuracy, precision, recall, F1 score, and confusion matrix.
  - o Analyze the results and compare the performance of different models.