**Mental Health Sentiment Analysis Using NLP**

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**Problem Statement**

Given the rise in mental health awareness, it’s critical to detect emotional states through written conversations. This project leverages natural language processing (NLP) to classify and analyze mental health-related conversations, identifying sentiments like anxiety or depression. Our AI model can assist professionals in understanding individuals’ emotional conditions from text.

**Project Overview**

This project involves:

1. **Data Pre-processing**: Text cleaning and tokenization.
2. **Exploratory Data Analysis (EDA)**: Visualizing word distributions and sentiment counts.
3. **Model Building**: Implementing models (LSTM, CNN) and comparing results.
4. **Evaluation**: Assessing accuracy and other performance metrics.

**Sources**

* **Kaggle**: Dataset of mental health conversations for NLP, essential for building and training the model [Kaggle Mental Health Conversations Dataset](https://www.kaggle.com/datasets/thedevastator/nlp-mental-health-conversations).
* **NLTK Library**: Provides stopwords and tokenization utilities for data preprocessing.
* **TensorFlow/Keras Documentation**: Official resources for building neural networks, including LSTM and CNN architectures, essential for model implementation.