## Akul Shah & Jeffrey Duan 3/20/23

## Problem Statement:

In our world today, we have a lot of information regarding people's thoughts and feelings in real time through various social media platforms like instagram, twitter, and facebook. The question is how do we signify and group those thoughts into specific sentiments like joy, anger, fear and most difficult sarcasm. Our goal is to use the transformer architecture to create a sentiment analysis model that will take advantage of the gate tokenization technique that will allow us to use context clues in social media like hashtags to help detect sarcasm.

## Implementation:

We will expand upon an existing model in the hugging face library, then implement this gate tokenization technique to help analyze tweets and distinguish whether or not those represent sarcasm.