

A stylized illustration of a bird with blue and orange plumage perched on a dark branch. The branch is adorned with orange and green leaves and small berries. The background is a light beige color.

Twitter Sentiment

Or how I learned to love the birds...

Twitter Sentiment

Twitter is one of the more popular social media sites available and as such acts as a digital public forums. Being able to parse this data and review sentiment from a quantitative aspect enables us to understand trends in public sentiment towards us as public facing entities in politics, business, and entertainment.

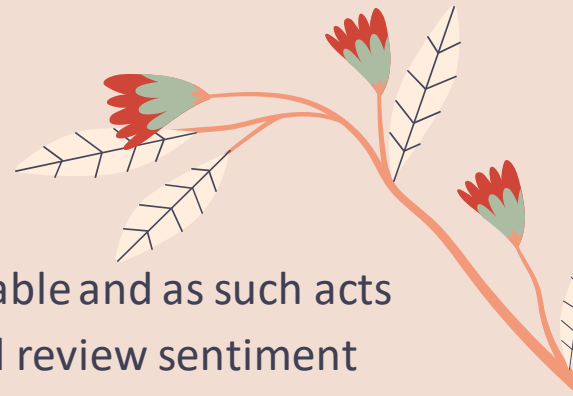
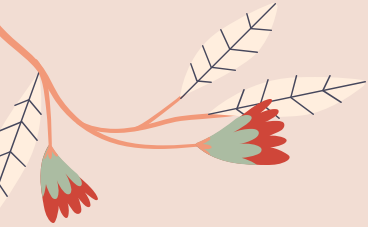


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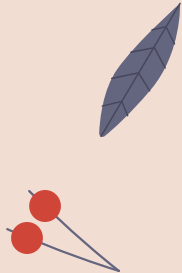
What Can Sentiment Tell Us?





Twitter Access

How Do We Access Twitter?



Accessing Twitter

Accessing Twitter Is Easy!

- <https://dev.twitter.com/apps>
- Sign up
- Create a sample application
- Use google.com for your site
- Get your 4 primary identifiers
 1. consumer key
 2. consumer secret
 3. access token
 4. access token secret
- Click on Create Access Token to create those





2

Tweepy

How Do We Get Tweets?

Tweepy

Simple Python API: <https://docs.tweepy.org/en/stable/>



Authorize

Pass your Twitter primary identifiers to the API to authorize and authenticate to Twitter



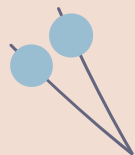
Search and Collect

Search for your desired terms and collect results



Store In Dataframe

Run through your results and filter or organize as desired then store in a Dataframe for later





3

Hugging Face

How Do We Score
Sentiment?



Hugging Face Is Easy!

Transformers

Install Transformers
Package: <https://pypi.org/project/transformers/>

01

Import Resources

Using Transformers and
Model Card Import Needed
Resources

03

Score Sentiment

Score Tweet Sentiment

05

02

Model Selection

Select a Model from
Hugging
Face: <https://huggingface.co/>

04

Define Function

Define your Function to
Use the Resources

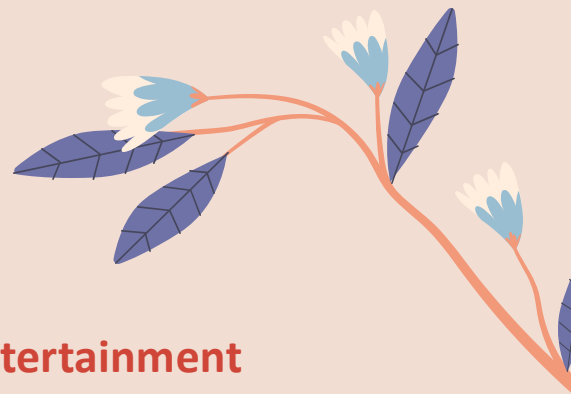


4

Application

What Can Sentiment Tell Us?

Application of Sentiment?



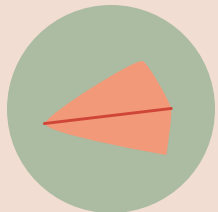
Politics

Twitter is easier than polls.



Entertainment

Will Ant Man bomb?



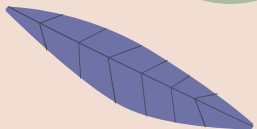
Business

How do people feel about eli lilly lowering insulin costs?



Equities

What is the sentiment towards a stock?



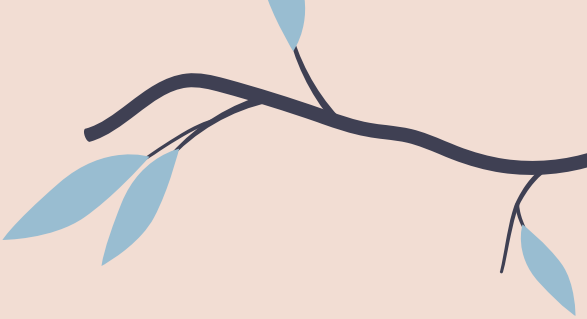



Sentiment Represents Information!

Sentiment is a form of information
that can be used to help determine
market conditions!

[https://www.ncbi.nlm.nih.gov/pmc/
articles/PMC9324505/](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9324505/)





“The proposition is that prices reflect all available information, which in simple terms means since prices reflect all available information, there's no way to beat the market.”



—Eugene Fama



368,000,000

Active Monthly Twitter Users

237,000,000

Active Daily Twitter Users



6,000

Tweets Per Second



That Is A Lot Of Information!


Twitter is an information rich source to gauge public sentiment and use in the highlighted areas.





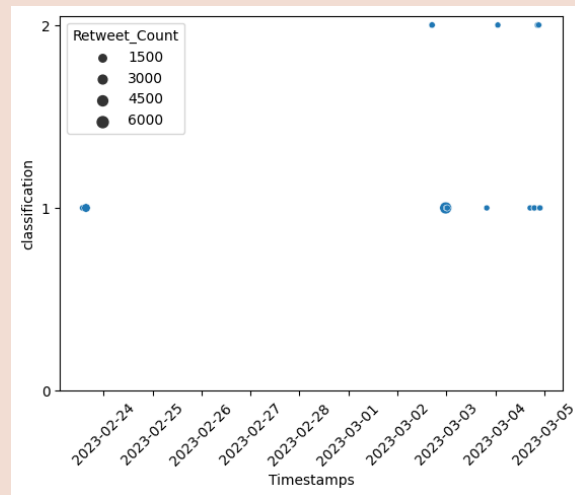
Applied Use Case

1




Keanu?

- Saw lots of Keanu news on 3/4/2023.
- Pulled up sentiment using script.
- Saw sentiment was neutral with some positive Tweets.





Applied Use Case 2



How do people feel about Ant-Man?

- Thinking to see Ant-Man.
 - Pulled up sentiment using script.
 - Saw sentiment was mixed; wait for Disney Plus release....
- 