

## MVP:

Design a product which is able to extract a specific user information from Twitter by using existing Twitter API and perform a sentimental analysis by using Google NLP API. By using this product, the Twitter developer and marketing management team are able to find a specific user's tweets by entering user's username and notice all his/her tweets' sentiments and thus the developer is able to improve the algorithm to provide tweets that user is interested in and members in the marketing management team is able to identify when and how to engage with the user directly, such as finding more related advertisements for users and this way increasing the company's profit.

## Users:

APP's developer and marketing management team

## User stories:

As a developer, I want to know the sentiment of users' tweets, so that I can improve the algorithms to provide more related tweets.

As a developer, I want to find a specific user's tweets, so that I can provide tweets to that user.

As a member of marketing management team, I want to know the users' attitude towards posts, so that I can find more related advertisements to increase the profit.

## Design:

The client can enter a twitter user's username and then Apply the Twitter API to extract information from a specific user and save this user's tweets content into a CSV file. Read the content in the CSV file and use Google NLP API to analyze the sentiments of each tweet.

## Test:

The output of CSV file

0	veritasium	Serious
1	veritasium	@Arghadeep469 @MysteryGuitarM Tomorrow
2	veritasium	@MysteryGuitarM Guitar: impossible - marriage of figaro
3	veritasium	@Benny__2609 No immediate plans for it but maybe some dayâ€¦
4	veritasium	@CJHandmer @Cosmic_Horizons @lauroralei Iâ€™ve done videos on this in the past with just a hand wave, eg <a href="https://t.co/mEldx7Bi7i">https://t.co/mEldx7Bi7i</a>
5	veritasium	@devinbarney11 All good. This is a popular topic and I know a lot of people are into it. Itâ€™s important to know!
6	veritasium	@devinbarney11 Iâ€™m not aware of that book or author. Inspirations are mainly Kahneman and Ericsson and others cited
7	veritasium	Which would you click?
8	veritasium	New
9	veritasium	@jasonzweigswj hey, Iâ€™m trying to find the original source for something in one of your articles. Can you please help me find it?
10	veritasium	@1ine4r @Jawad_Dheini @LCTTA @MBurnsKaurin The ions are mobile so if you bring something positive close by the negatives will move closer to it. If you bring something nega
11	veritasium	@Jawad_Dheini @LCTTA @MBurnsKaurin Right. Pure water contains ions: H+ and OH-
12	veritasium	@MBurn
13	veritasium	@FurbyFubar Iâ€™ve got \$20 per ounce for gold in 1850 <a href="https://t.co/i2DrqEFPL6">https://t.co/i2DrqEFPL6</a>
14	veritasium	RT
15	veritasium	Aussies!

A snapshot of the csv file

The output of python script, which shows the sentiments of texts

```
Text: @captainspinifex I am curious, which ones do you find clickbaity/false?
Sentiment: -0.30000001192092896, 0.30000001192092896
Text: Which thumbnail do you prefer?
Sentiment: 0.0, 0.0
Text: Which thumbnail do you prefer?
(poll below) https://t.co/kXPNiJaJWY
Sentiment: 0.0, 0.0
Text: @Robin_B Was great to meet you and see your art!
Sentiment: 0.8999999761581421, 0.8999999761581421
Text: @christos_markou I can upload an .srt file if you email it to me...
Sentiment: -0.1000000149011612, 0.1000000149011612
Text: @Tauss_srg1 Me too! I built 10 ft supporting structures to isolate the circuit
Sentiment: 0.30000001192092896, 0.6000000238418579
Text: @linusgsebastian @Dropbox Yes please!
Sentiment: 0.699999988079071, 0.699999988079071
Text: @TheDukeInPurple @Dropbox But apparently it doesn't just do that if you transfer in with more than 4TB which se
ems dumb. The starting limit should be at least 5 TB since they know that's what you came from
Sentiment: -0.5, 1.100000023841858
Text: @brettrann @Dropbox I don't understand who made this decision And why it hasn't been fixed yet
Sentiment: -0.800000011920929, 0.800000011920929
Text: @TheDukeInPurple @Dropbox The second support guy I talked to explained it like this. The first told me to call
anytime I needed more space 🙄
Sentiment: 0.0, 0.6000000238418579
Text: That's right, with @Dropbox you pay more money and get less storage, by default.

Dropbox declined to offer any compensation for their idiotic business practice or the inconvenience it caused.

So anyone got good cloud storage recommendations?
Sentiment: -0.5, 1.5
```

A snapshot of sentimental analysis

#### Reference:

<https://www.youtube.com/watch?v=Lu1nskBkPJU>

<https://www.youtube.com/watch?v=iqRgOdJZtiY>