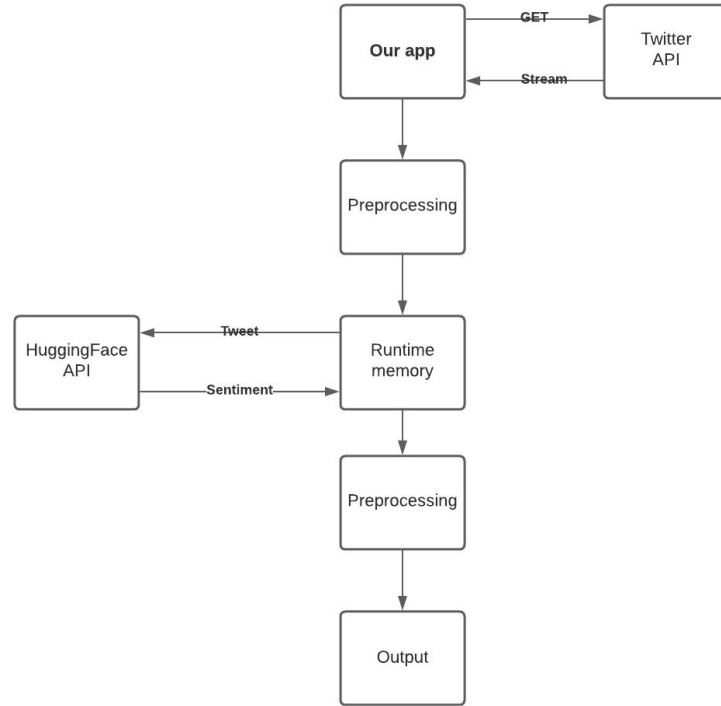


Twitter real-time sentiment analysis



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Kamil Książek

High-level architecture



Technological obstacles

- We couldn't establish connection to TCP socket
- Netcore commands to open port didn't work
- Apache Kafka errors

```
MINGW64/c:/Users/lenovo/Desktop/RTA/project/kafka_2.13-2.8.0
lenovo@DESKTOP-A0F2LEC MINGW64 ~/Desktop/RTA/project/kafka_2.13-2.8.0
$ bin/zookeeper-server-start.sh config/zookeeper.properties
[0.006s][error][logging] Error opening log file '/c:/Users/lenovo/Desktop/RTA/project/kafka_2.13-2.8.0/bin/../logs/zookeeper-gc.log': No such file or directory
[0.006s][error][logging] Initialization of output 'file=/c:/Users/lenovo/Desktop/RTA/project/kafka_2.13-2.8.0/bin/../logs/zookeeper-gc.log' using options 'filecount=10,filesize=100M' failed.
Invalid -Xlog option '-Xlog:gc*:file=/c:/Users/lenovo/Desktop/RTA/project/kafka_2.13-2.8.0/bin/../logs/zookeeper-gc.log:time,tags:filecount=10,filesize=100M', see error log for details.
Error: Could not create the Java Virtual Machine.
Error: A fatal exception has occurred. Program will exit.

lenovo@DESKTOP-A0F2LEC MINGW64 ~/Desktop/RTA/project/kafka_2.13-2.8.0
$ |
```

```
C:\Users\lenovo>nc -lk 9999
'nc' is not recognized as an internal or external command,
operable program or batch file.
```

Twitter API



Standard

Sentiment analysis test >

V1.1 ACCESS

V2 ACCESS

PROJECT APP



sentiment_analysis342432432



GET Stream (see description)


```
https://api.twitter.com/2/tweets/search/stream
```


Streams Tweets in real-time based on a specific set of filter rules.

Please note streaming responses are currently [not supported](#) in Postman. Use this to help form your request, then click on Code > cURL. Copy the cURL command and paste in terminal to view the response.

Sentiment analysis with HuggingFace API

Model: distilbert-base-uncased-finetuned-sst-2-english

 **Hosted inference API** ⓘ


 Text Classification

Compute

Computation time on cpu: cached

NEGATIVE0.000

POSITIVE1.000


</> JSON Output  Maximize







Preprocessing functions

Parse JSONs - Parsing incoming JSON data from Twitter to plain text for NLP analysis

Value checker - Function for sentiment data from HuggingFace API to compare probabilities of labels and display only the label with the highest probability

Outcome

```
Run:  twitter_stream (1) x
```

```
 ↑ RT @CNNPolitics: A new book written by one of President Joe Biden's top coronavirus advisers suggests Dr. Deborah Birx hoped former Preside...  
POSITIVE  
 ↓ RT @RealCandace0: No matter how many times the Democrats say it, Donald Trump never once used language to incite violence.  
He was banned f...  
NEGATIVE  
 RT @CNNPolitics: A new book written by one of President Joe Biden's top coronavirus advisers suggests Dr. Deborah Birx hoped former Preside...  
POSITIVE  
 RT @RealCandace0: No matter how many times the Democrats say it, Donald Trump never once used language to incite violence.  
He was banned f...  
NEGATIVE  
 
```