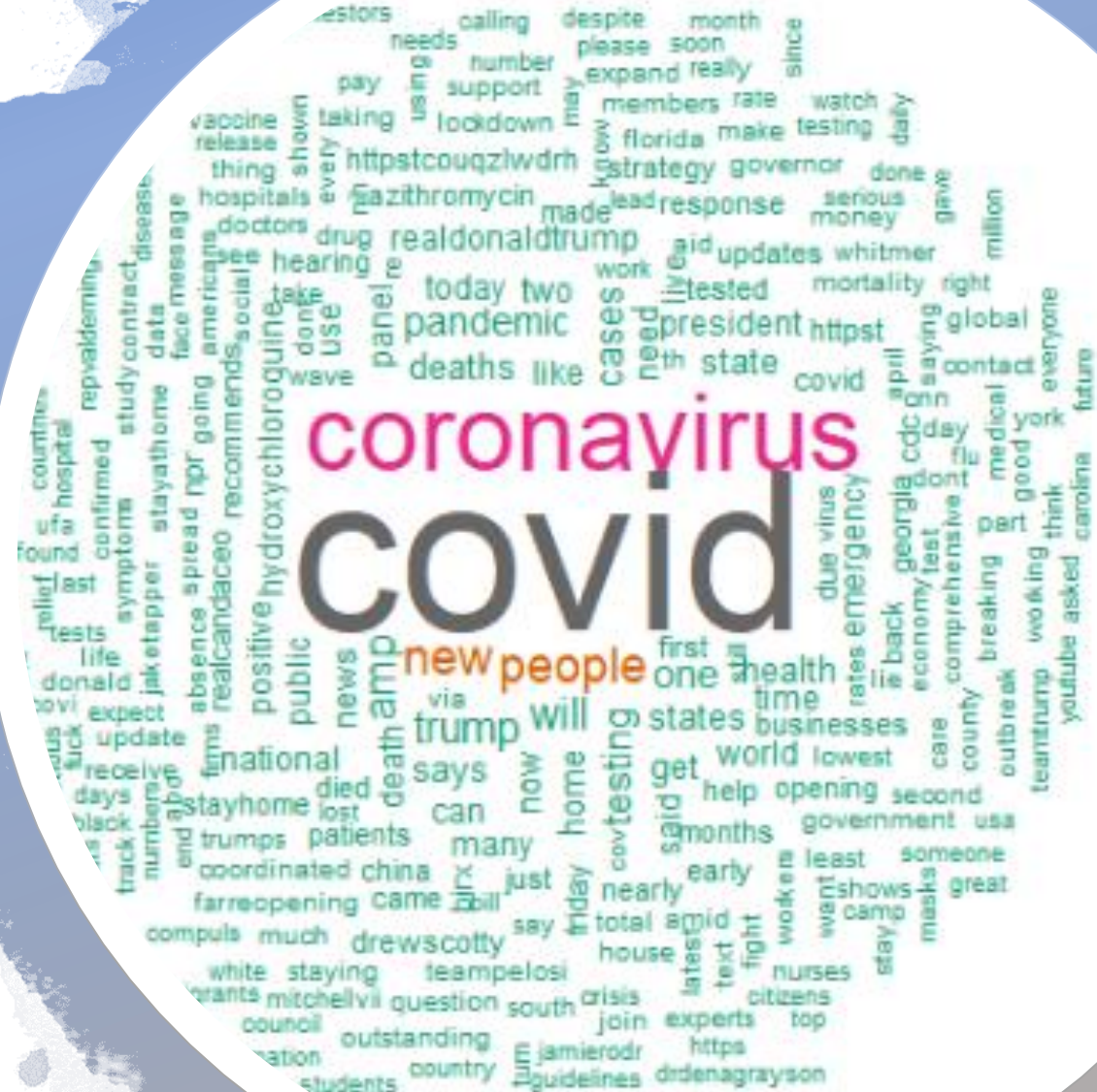


OPINION MINING WITH TWITTER

Submitted by:

- Amruta Deshpande
- Srushti Padade
- Harika Penjerla
- Chujun Huang



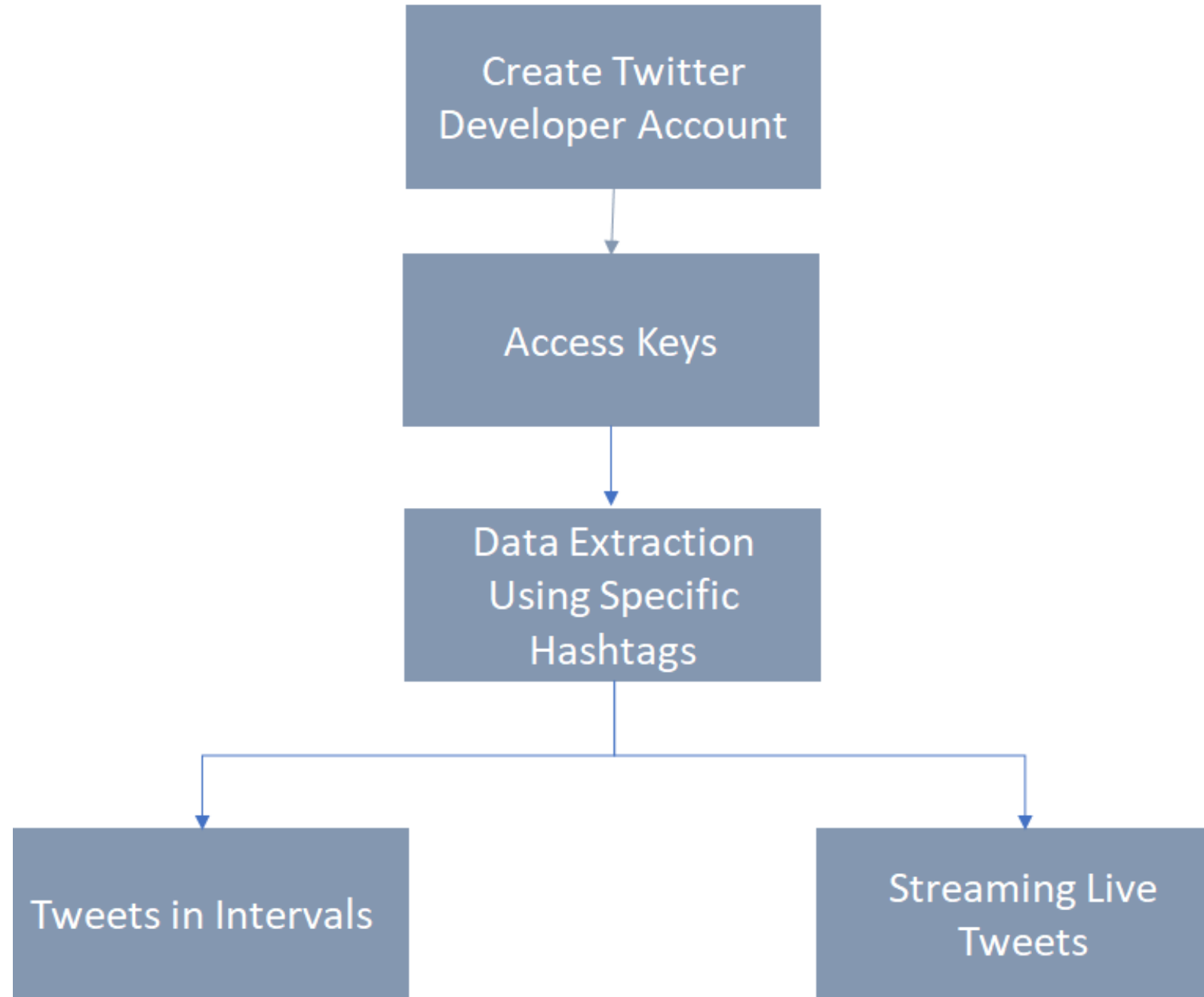
OBJECTIVE

- To analyze people opinion on present health crisis- COVID19.
- Sentiment Analysis, is a useful tool within NLP to identify people reaction to existing situation.
- Twitter is one of the popular social media.

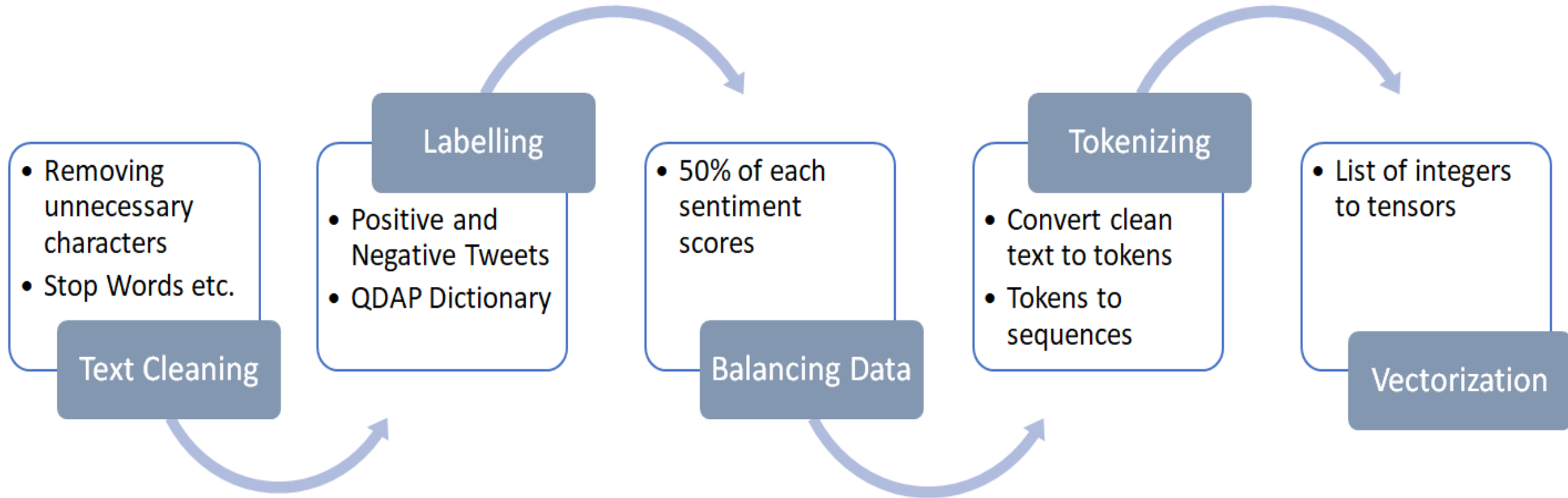


OVERVIEW OF TWITTER DATA

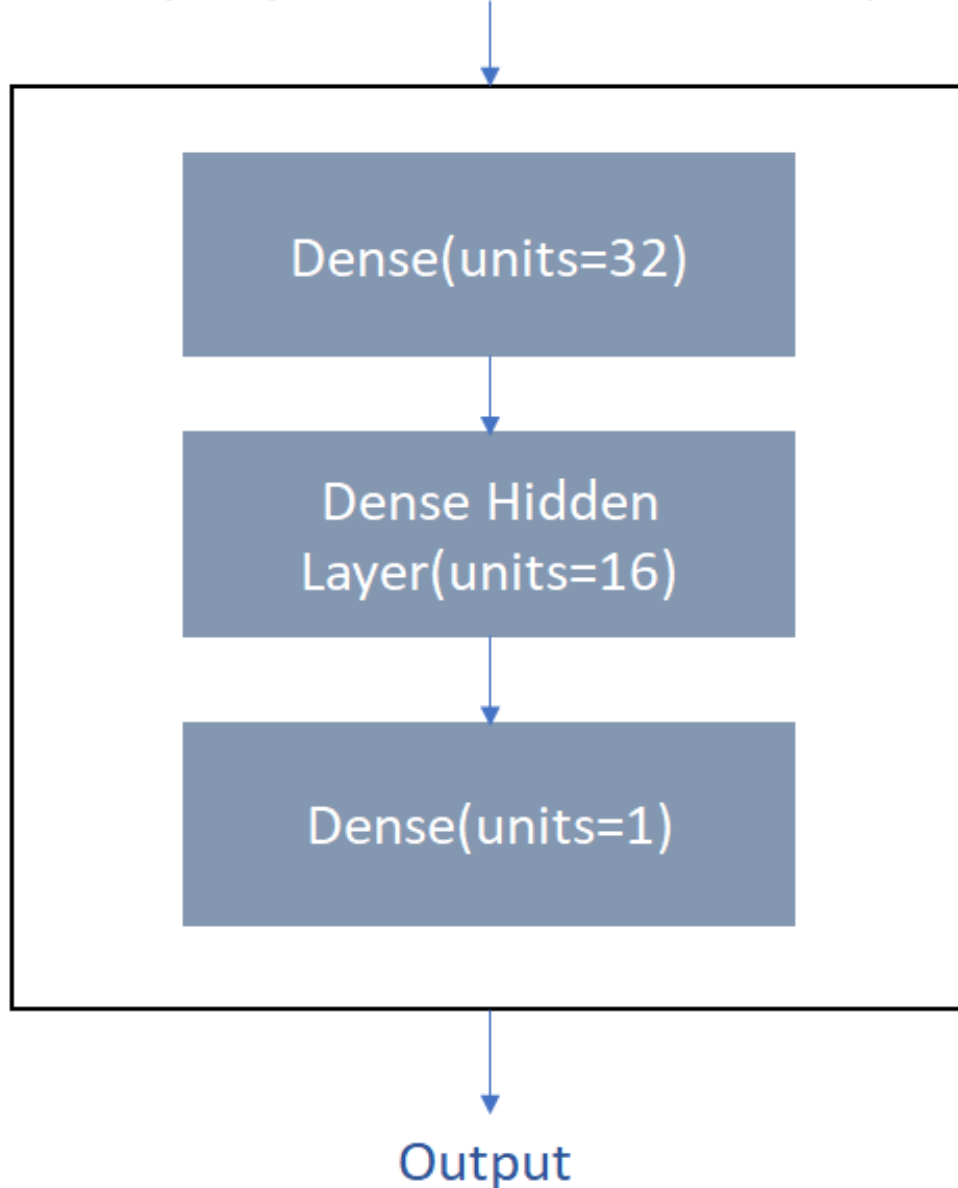
- 2.5 Lakhs Tweets from United States.
- Tags:
 - #COVID-19,
 - #StayAtHome
 - #CoronaVirusUSA
 - Etc.



DATA PREPROCESS



Input (Vectorized Text/ Tensors)



NEURAL NETWORK

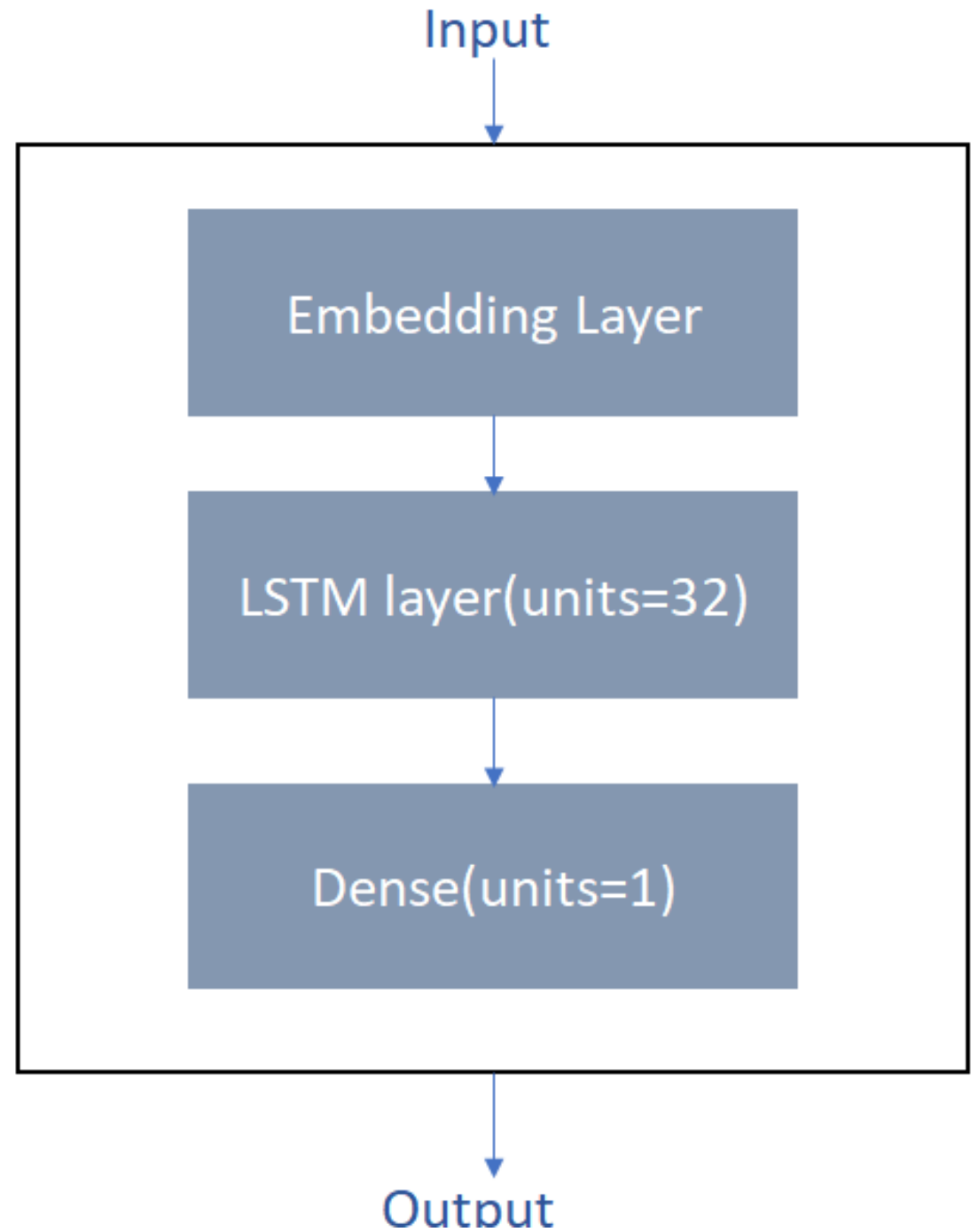
Model Specifications:

- Activation Function : RELU
- Output Activation Function : SIGMOID
- Loss Function: Binary_Crossentropy
- Optimizer: rmsprop
- Learning Rate: 0.001.

LONG SHORT-TERM MEMORY

Model Specifications

- Input_length: 20
- Output Activation function: Sigmoid
- Optimizer :rmsprop
- Loss:binary_crossentropy



REFINEMENT



HYPERPARAMETER
TUNING



DROPOUT



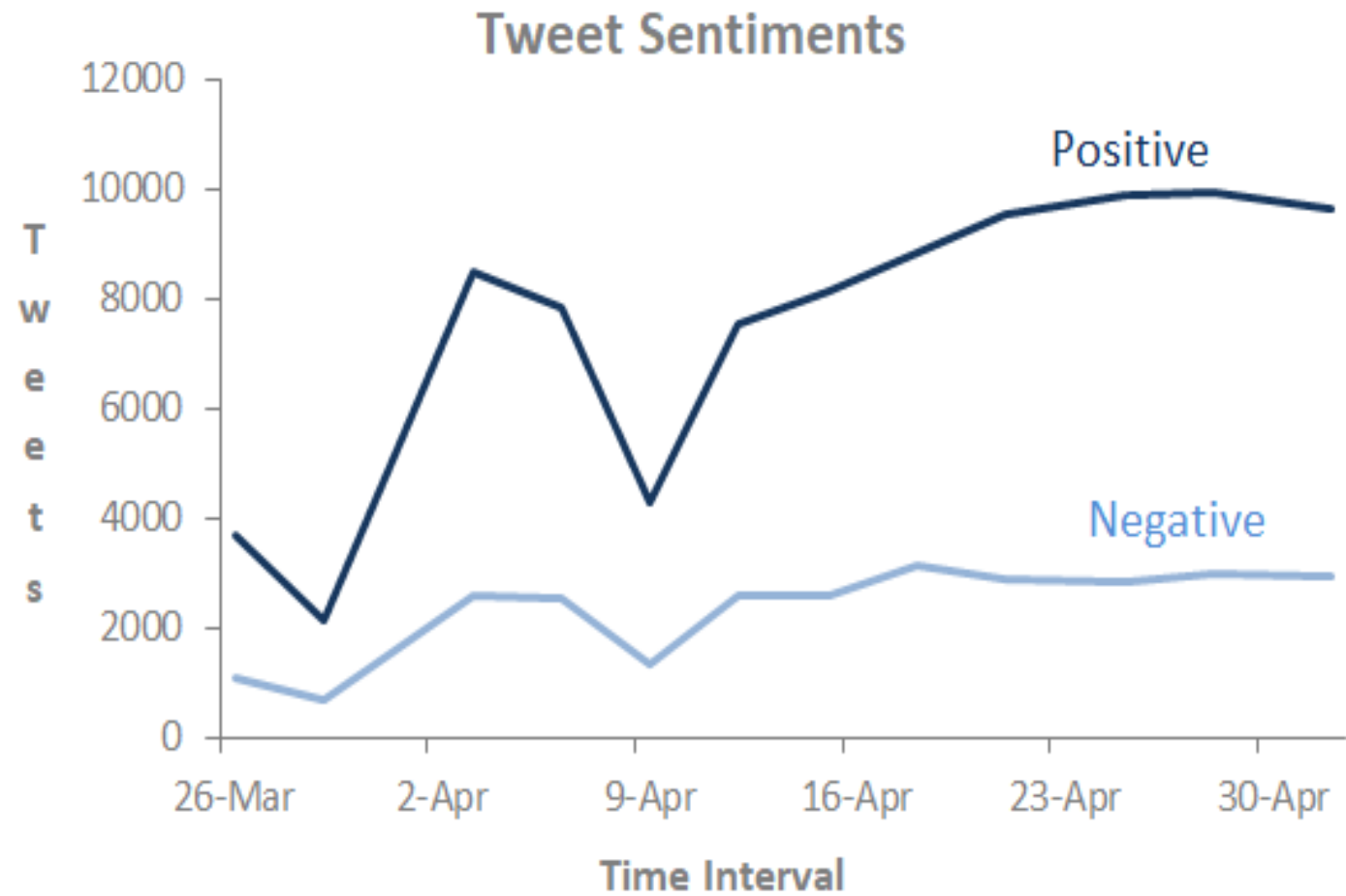
L-2
REGULARIZATION



CALLBACK

CONCLUSION

Recurrent Neural Network is used for the sentiment analysis from the United States tweets. As the data we extracted have an overview of the COVID-19 situation, we could see the POSITIVITY among the masses.



STAY SAFE

