Twitter Sentiment Analysis

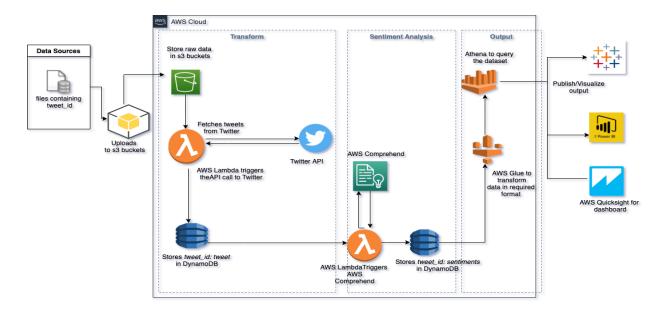
Goal

We want to do sentiment analysis on the various tweets for certain global events of importance in the past

Flow

- 1. The input compressed files are decompressed and uploaded to AWS S3 to be processed by downstream systems.
- 2. *tweet_ids* are read from the S3 bucket and corresponding tweets are fetched from Twitter by API calls.
- 3. AWS Lambda triggers API call to twitter once there is a dataset in S3.
- 4. The *tweet ids* along with the tweets are stored in DynamoDB.
- 5. AWS Lambda triggers comprehend to fetch the sentiment associated with the tweets.
- 6. The tweets are read from DynamoDb and AWS Comprehend is used to derive the sentiments for the tweets.
- 7. tweet ids along with the sentiment are stored in DynamoDB (Key-value pair).
- 8. AWS Glue helps to transform the data in a particular format.
- 9. AWS Athena will be used to query the dataset for various analysis.
- 10. AWS Quicksight will be used for visualizations.

Architecture Diagram



Note: The architecture diagram can change in the next iteration