Get started with Otterview Project Setup

Overview

- → This tutorial will guide you through setting up Otterview through AWS CLI (Cloudshell).
- → Otterview is an application that can get the sentiment analysis from a provided event and generate a grade based on said analysis.
- → In more detailed terms:
 - Otterview asks you to name your event and provide an analysis time.
 - Otterview then takes that information and runs an analysis on Twitter comments pertaining to said event.
 - Otterview then takes the analyzed information and creates a React App to showcase the analyze results.
- → Now that you have a gist of things, let's get started!

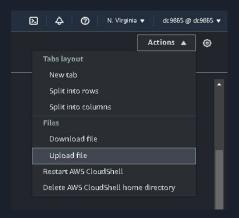
Prerequisites

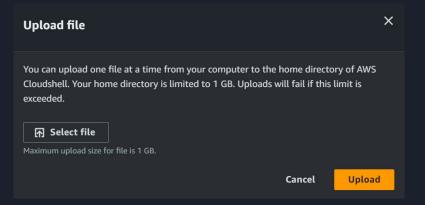
Before setting up Otterview, please make sure you have done or have the following:

- An AWS Free-Tier Account
- AWS Cloudshell runs Python 3.4 or later (Preferably 2.7)
- Go to line 225 in 'ov_setup.yml' and insert the bearer token corresponding to your Twitter developer account or a Twitter developer account you have access to.
- Look at the Cloudformation resources in 'ov_setup.yml'. Are there any duplicate resources currently running on your AWS Console? If so, DELETE THEM.

Step 1: Upload files to AWS Cloudshell

- → Make sure you have both 'otterview.py' and 'ov_setup.yml' files
- 1. Open up your AWS Console and go to 'AWS Cloudshell'.
- 2. Click the 'Actions' dropdown at the top right of the terminal.
- 3. From the dropdown, select 'Upload File'.
- 4. Select the one of the two files to upload then press 'Upload'.
- 5. Wait a few seconds, then repeat Steps 2-4 for the other file.





Step 2: Start Otterview

- → Before starting Step 2, make sure the files have successfully been uploaded to your terminal by executing the ls command.
- 1. In the terminal type or copy/paste the following command:
 - a. python otterview.py
- 2. Press ENTER. You should now see a welcome message in the terminal.
- 3. You have now successfully started Otterview!

```
[cloudshell-user@ip-10-4-172-67 ~]$ python otterview.py
~~~ Welcome to Otterview! ~~~
An Event Sentiment Analysis Tool
```

Step 3: Analyzing an Event

- → With the current implementation of Otterview, tweets are being retrieve in real-time. So for best results, try selecting an event that is currently going on and is very popular on social media.
- → For this example we will be using Coachella as our event but at the time you're setting up this application it may be over. Below are other events happening currently and also at the time you may be setting this up:
 - ♦ coachella
 - nbafinals
 - {enter any concerts, sporting events, etc.}
- → You can check Twitter to see current popular hashtags!

Step 3: Analyzing an Event (Continued)

- 1. Enter the name of your event, i.e 'coachella'
- 2. Enter the amount of time in seconds you want the twitter api to search for tweets (make sure your value is between 10-15s), i.e '10'
- 3. Otterview will now begin it's analysis. You can follow along with the terminal and the process usually takes about 3-5 minutes.

```
[cloudshell-user@ip-10-4-172-67 ~]$ python otterview.py
~~~ Welcome to Otterview! ~~~
An Event Sentiment Analysis Tool
Please enter the name of your event to begin: coachella
Please enter how long you would like to collect data (in seconds): 10
```

Step 3: Analyzing an Event (Continued)

- → By the end of the process you should have something similar to the picture on the right.
- → If you do not have something similar to this, please look at the 'Troubleshoot' slide at the end of this presentation.

```
--- INITALIZING AWS TECHNOLOGIES ---
Waiting for changeset to be created...
No changes to deploy. Stack ov-stack is up to date
--- AWS TECHNOLOGIES INITALIZED ---
--- LAUNCHING BACKEND ENVIRONMENT ---
    "StatusCode": 200.
    "ExecutedVersion": "$LATEST"
Sentiment Analysis Completed for coachella.
Total Comments Gathered: 68
Total Positive Comments: 63 (92.65%)
Total Negative Comments: 5(7.35%)
 --- BACKEND ENVIRONMENT CREATED, EVENT SENTIMENT ANALYSIS COMPLETED ---
--- LAUNCHING FRONT END ENVIRONMENT ---
         <u>appId"</u>: "dhxrna4jyw373",
        "appArn": "arn:aws:amplify:us-east-1:735691669062:apps/dhxrna4jyw373",
        "name": "ov-amplify",
        "tags": {},
        "repository": "https://github.com/swen-514-614-spr-2023-2/team-3",
        "platform": "WEB".
        "createTime": "2023-04-24T01:47:38.433000+00:00",
        "updateTime": "2023-04-24T18:51:15.674000+00:00",
        "iamServiceRoleArn": "arn:aws:iam::735691669062:role/AmplifyRole",
            "REACT_APP_ENV_API_URL": "https://or19fcxao6.execute-api.us-east-1.amazonaws.com/prod",
            "REACT_APP_ENV_POS_PERCENT": "92.65"
        "defaultDomain": "dhxrna4jyw373.amplifyapp.com",
        "enableBranchAutoBuild": false,
        "enableBranchAutoDeletion": false,
        "enableBasicAuth": false,
        "customRules": [].
        "productionBranch": {
            "lastDeployTime": "2023-04-24T16:41:31.856000+00:00",
            "status": "SUCCEED",
            "branchName": "main'
        "customHeaders": "",
        "enableAutoBranchCreation": false.
        "repositorvCloneMethod": "SSH"
         jobarn": "arn:aws:amplify:us-east-1:735691669062:apps/dhxrna4jyw373/branches/main/jobs/0000000003",
        "jobId": "3",
        "commitId": "HEAD".
        "commitTime": "2023-04-24T18:51:17.298000+00:00",
        "status": "PENDING"
--- WEBSITE BUILDING, PLEASE WAIT ---
ACCESS OTTERVIEW WEBSITE: https://main.dhxrna4jyw373.amplifyapp.com/
--- FRONT END CREATED ---
```

Step 4: Navigate to Otterview Website

- 1. At the second to last line in the output from the other step you should see the website url next to 'ACCESS OTTERVIEW WEBSITE'. Copy that link and paste it in a new tab.
- 2. You should now be able to view and scroll through the Otterview analysis of your event.
- 3. Website Example is on the next slide.

```
--- WEBSITE BUILDING, PLEASE WAIT ---
ACCESS OTTERVIEW WEBSITE: https://main.dhxrna4jyw373.amplifyapp.com/
--- FRONT END CREATED ---
```

OtterView

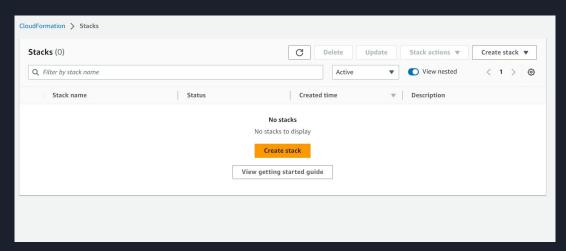
An event sentiment analysis system.

#	Tweet	(+) Sentiment	(-) Sentimen
1650315772621897700	RT @voguemagazine: .@BLACKPINK embraced their coordinated girl group style for weekend 2 of their headlining performance at #Coachella. See	0.287	0.006
1650539720215081000	RT @WORLDMUSICAWARD: Top 10 Most Mentioned Artists across social and news media at this year's $\#$ Coachella according to $\#$ NetBaseQuidl $\#$ 6	0.437	0.000
1650539 709 192630300	RT @BuzzingPop: Most mentioned artists on social media during the 2023 #Coachella, NetBase Quid reports: #1. #BLACKPINK #2. LISA #3. Je	0.064	0.012
1650539641064267800	RT @TheSkyWriters: Flying Banner on it's way to Coachella now! ETA 3:07PM PST WE ▼ U JENNIE #JENCHELLA #COACHELLA #banner #weloveujennie #t	0.492	0.002
165053956 1632829400	RT @LisaFamilyClub: ศิลบินที่ถูกกล่าวถึงในโชเซียลมีเดียและสื่อข่าวในงาน #Coachella 2023 - #LISA เป็นศิลบินเดียวที่ถูกพูดถึง มากที่สุด	0.002	0.000
16503 15644749992000	can't wait for weekend 2 😂 🍪 #DominicFike #Coachella https://t.co/iYLp70F9bU	0.873	0.000
1650539774455992300	RT @WORLDMUSICAWARD: Top 10 Most Mentioned Artists across social and news media at this year's #Coachella according to #NetBaseQuidl 💗 🔓	0.437	0.000
16503 155 77259442200	RT @nicole852g7: HER TYPE OF PARTY A FUCKING BOP #JacksonWangCoachella #JacksonWangCheetah #Coachella	0.007	0.924
1650539650258456600	RT @billboard: Here's everything you missed at #Coachella weekend 1, including the biggest performances, best parties & amp; more. 🎉 🐧 #Billboard	0.576	0.010
16503158006564 4 5 4 00	RT @BLACKPINK: #BLACKPINK COACHELLA WEEK 1 BEHIND PHOTO #블랙핑크 #COACHELLA #WEEK1 #BEHIND #PHOTO #YG https://t.co/afi9TuhW6G	0.001	0.005
16503 15662982 795300	RT @voguemagazine:.@BLACKPINK embraced their coordinated girl group style for weekend 2 of their headlining performance at #Coachella. See	0.287	0.006
1650315610851795000	RT @stillyouwje: ใจละวายขยยย 😤 😩 😭 🐿 เพื่อ JacksonWang852 #JacksonWangCoachella #JacksonWang #Coachella https://t.co/2eBWZGdzFm	0.008	0.402
16503 156 1719 7772800	2manydjsはホント懐メロ満載だな〜w フェス向き #Coachella https://t.co/wk3kAxj86s	0.893	0.003
1650539640628347000	RT @BuzzingPop: Most mentioned artists on social media during the 2023 #Coachella, NetBase Quid reports: #1. #BLACKPINK #2. LISA #3. Je	0.064	0.012
1650539773289967600	RT @ThePopTingz: #ELACKPINK's Lisa was the most talked about person on social media during the 2023 #Coachella, according to NetBase Quid	0.203	0.044
16503 15692 145 78 7000	RT @stillyouwje: ท่ายเหนื D @JacksonWang852 #JacksonWangCoachella #JacksonWang #Coachella https://t.co/35stkk/WpSx	0.028	0.222
1650539684240715800	RT @WORLDMUSICAWARD: #Lisa shares gorgeous new pics with #Jennie from #Coachella this weekendi疆 协 当 3	0.725	0.000
1650539562631037000	RT @ThePopTingz: #BLACKPINK's Lisa was the most talked about person on social media during the 2023 #Coachella, according to NetBase Quid	0.203	0.044
1650539643379613700	RT @BuzzingPop: //soo's solo set at #Coachella was lauded for spreading the beauty of Korea and Korean language on Western stage. https://t	0.032	0.627
1650315611765866500	RT @WORLDMUSICAWARD: #LISA drives the crowd wild at #Coachella and ups the heat with her sexy moves on a dance pole during #Money, impressi	0.453	0.013



Step 5: Clean up

- → After you have viewed and recorded your event sentiment analysis, it is now time to clean everything up.
- 1. Go back to AWS Cloudshell and type or copy/paste the following command:
 - a. aws cloudformation delete-stack --stack-name ov-stack
- 2. Verify that the stack has been deleted by checking the AWS Cloudformation Console



Troubleshooting



- → Key Error
 - No tweets were pulled due to Event not being currently relevant
- → Cloudformation fails to run
 - ♦ Hooks need to be removed from Github so contact developers
- → Timeout Error
 - Shorten the time in seconds used to get analysis when first ran.
 - ♦ If used 10 and error occurred, try using 1