

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!



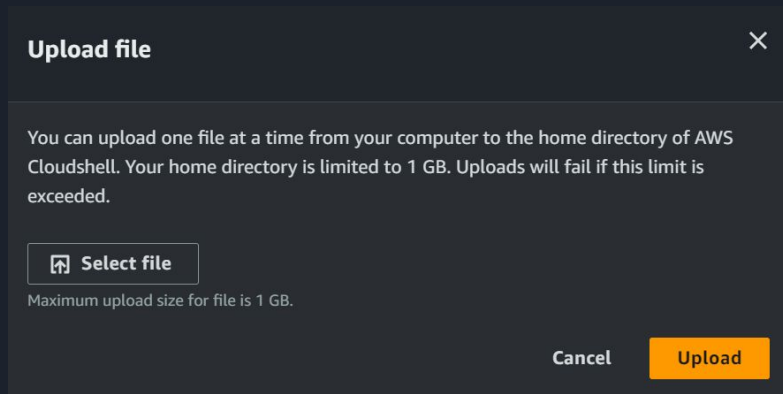
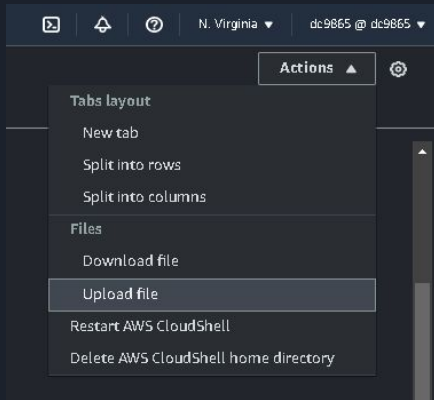
Prerequisites

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.

```
--- INITIALIZING AWS TECHNOLOGIES ---
Waiting for changeset to be created..

No changes to deploy. Stack on-stack is up to date
--- AWS TECHNOLOGIES INITIALIZED ---
--- 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 ---
{
  "app": {
    "appId": "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",
    "environmentVariables": {
      "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": "SUCCESS",
      "branchName": "main"
    },
    "customHeaders": "",
    "enableAutoBranchCreation": false,
    "repositoryCloneMethod": "SSH"
  },
  "jobSummary": {
    "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 ---  
_ _ _ _ _
```

An event sentiment analysis system.

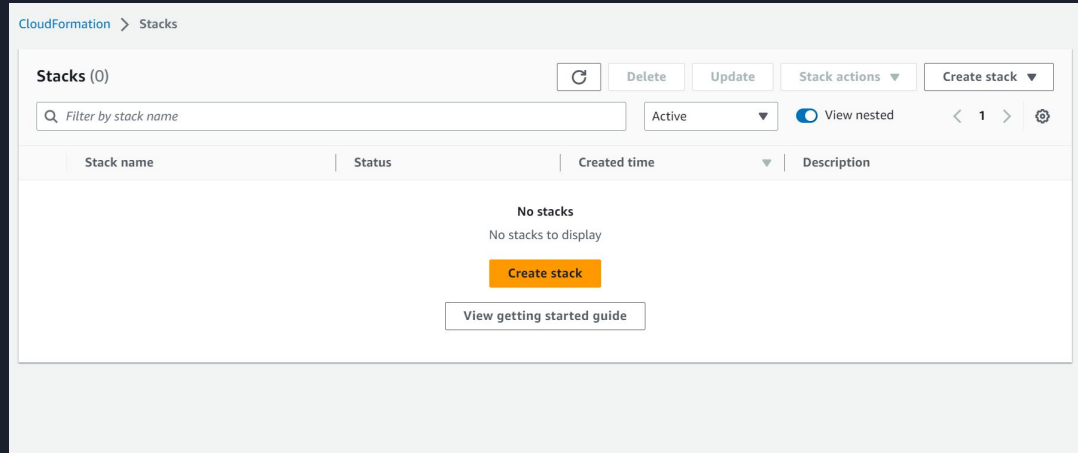


Total Comments Gathered: 137

93.33% Positive

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 the time in seconds used to get analysis when first ran.
 - ◆ If used 10 and error occurred, try using 1