Assignment 3 – Doordash delivery (with Codebuild)

# S3 (file received) -> Lambda Triggered (filter the data send delivered to target bucket)-> S3 and SNS notification

## S3 Bucket - doordash-landing-pra

```
File Edit Format View Help

[{"id": 1, "status": "delivered", "amount": 20.5, "date": "2024-03-09"},

{"id": 2, "status": "cancelled", "amount": 15.0, "date": "2024-03-09"},

{"id": 3, "status": "order placed", "amount": 22.5, "date": "2024-03-09"},

{"id": 4, "status": "delivered", "amount": 19.5, "date": "2024-03-09"},

{"id": 5, "status": "cancelled", "amount": 18.0, "date": "2024-03-09"},

{"id": 6, "status": "delivered", "amount": 23.5, "date": "2024-03-09"},

{"id": 7, "status": "order placed", "amount": 20.0, "date": "2024-03-09"},

{"id": 8, "status": "delivered", "amount": 25.5, "date": "2024-03-09"},

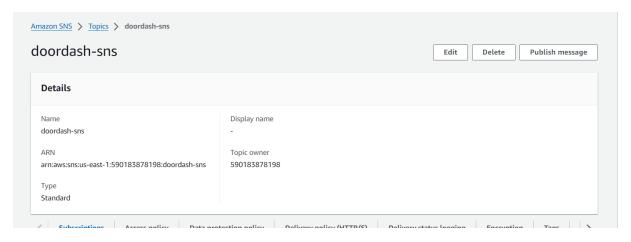
{"id": 9, "status": "delivered", "amount": 21.5, "date": "2024-03-09"},

{"id": 10, "status": "cancelled", "amount": 17.5, "date": "2024-03-09"}]
```

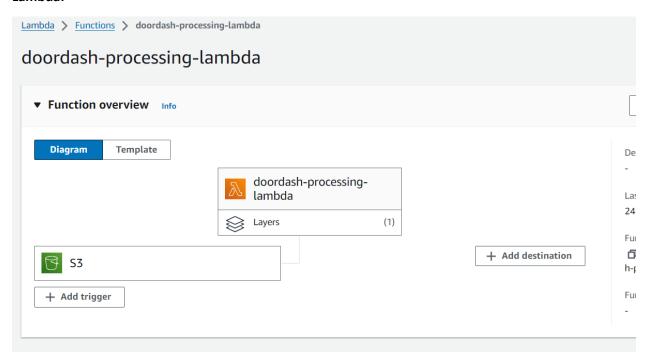
## S3 Buckets: Landing and target:

- doordash-landing-pra
- doordash-target-pra

## **SNS Topic:**



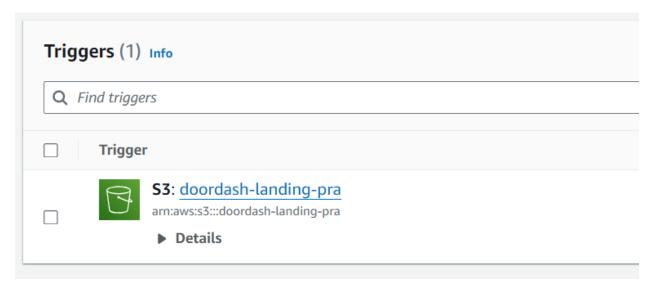
#### Lambda:



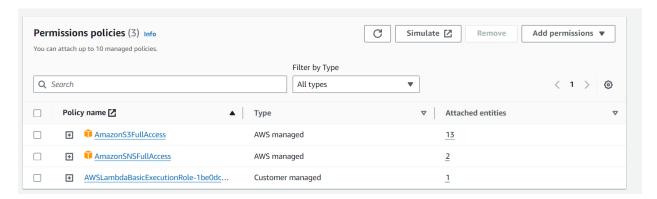
# Layers added for Pandas library:



Triggers: S3



Lambda Permissions:



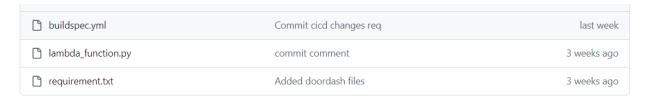
## Lambda Function Code:

```
Environment Vari × +
     lambda_function ×
                             Execution results ×
1
    import json
2
3
    import boto3
    import pandas as pd
4
6
7
    def lambda_handler(event, context):
         # TODO implement
8
9
         print(event)
10
         try:
11
             sns client = boto3.client('sns')
             s3_client = boto3.client('s3')
12
13
             sns_arn = 'arn:aws:sns:us-east-1:590183878198:doordash-sns'
             bucket = event["Records"][0]["s3"]["bucket"]["name"]
file = event["Records"][0]["s3"]["object"]["key"]
14
15
             obj = s3_client.get_object(Bucket = bucket, Key=file)
16
17
18
             data = obj['Body'].read().decode("utf-8")
19
20
             df = pd.read_json(data)
21
22
             filtered df = df[df['status'] == 'delivered']
23
             fjson = filtered_df.to_json(orient = 'records')
24
25
             print(filtered df)
26
             target_file = 'doordash.json'
             target_bucket = 'doordash-target-pra'
27
28
             s3_client.put_object(
29
             Body=fjson,
30
             Bucket=target bucket,
             Key=target_file
31
32
33
34
             message = f"File {target_file} has been successfully placed at {target_bucket}"
35
             sns_client.publish(Subject="SUCCESS - File processed and uploaded successfully",
             TargetArn=sns_arn,
36
37
             Message=message,
```

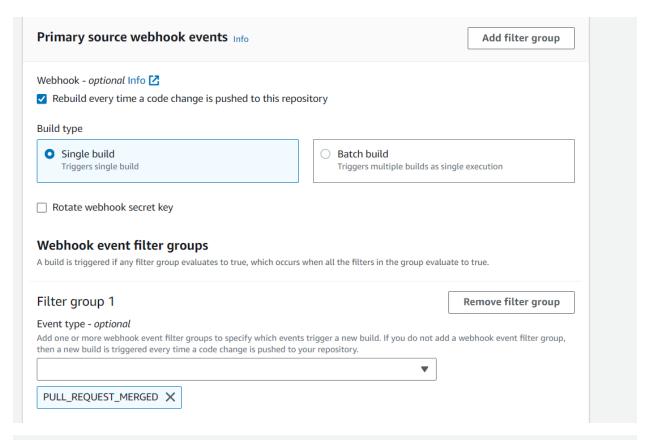
```
MessageStructure='text'
38
39
                )
40
41 -
        except Exception as err:
42
            print(err)
            sns_client.publish(Subject="Failed - File processing failed",
43
            TargetArn=sns_arn,
44
            Message="Processing failed",
45
46
            MessageStructure='text'
47
                )
48
49
50
51
52
        return {
53 🕶
            'statusCode': 200,
54
            'body': json.dumps('Hello from Lambda!')
55
56
57
```

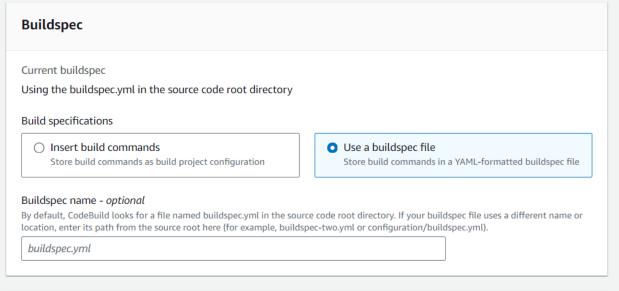
# **CI-DS using AWS Codebuild:**

Github repository created with name doordash\_git



Source Github repository





## Buildspec.yml:

```
Joshi Commit cicd changes req
                                                                                                                                         7cab919 · last week 🖰 H
Code Blame 26 lines (25 loc) · 820 Bytes Code 55% faster with GitHub Copilot
                                                                                                                                           Raw 🕒 🕹 🕖 🤻
   1 version: 0.2
            runtime-versions:
              python: 3.11
             commands:
              - echo "Installing dependencies..."
                - pip install -r requirement.txt -t lib
           pre_build:
   10
            commands:
              - echo "Nothing to do in the pre_build phase"
   11
           build:
   12
   13
              - echo " new Zipping deployment package..."
             - cd lib
- zip -r9 ../deployment_package.zip .
   15
   16
             - cd ..- zip -g deployment_package.zip lambda_function.py
   17
   18
   19
        post_build:
   20
             - echo "Uploading to S3..."
   21
              aws s3 cp deployment_package.zip s3://doordash-lambda-zip-cb/echo "Updating Lambda function via S3..."
   22
   23
   24
             - aws lambda update-function-code --function-name doordash-lambda-cicd --s3-bucket doordash-lambda-zip-cb --s3-key deployment_package.zip
   25
               - echo "Deployment complete!"
```

## Codebuild successful:

```
5179
5180 [Container] 2024/04/17 18:59:25.607461 Running command echo "Deployment complete!"
5181 Deployment complete!
5182
5183 [Container] 2024/04/17 18:59:25.614619 Phase complete: POST_BUILD State: SUCCEEDED
5184 [Container] 2024/04/17 18:59:25.614634 Phase context status code: Message:
```