


## 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**

 2024-03-09-raw\_input.json - Notepad

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:**

Amazon SNS > Topics > doordash-sns

doordash-sns

Edit Delete Publish message

Details	
Name doordash-sns	Display name -
ARN arn:aws:sns:us-east-1:590183878198:doordash-sns	Topic owner 590183878198
Type Standard	

Subscriptions Access policy Data protection policy Delivery policy (HTTP/S) Delivery status logging Execution Time

SNS Topic subscribed with email

## Lambda:


[Lambda](#) > [Functions](#) > doordash-processing-lambda


# doordash-processing-lambda


▼ Function overview [Info](#)

Diagram

Template

 doordash-processing-lambda

 Layers (1)

 S3

+ Add trigger

+ Add destination


De

-

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-

Layers added for Pandas library :

Layers <a href="#">Info</a>						<a href="#">Edit</a>	<a href="#">Add a layer</a>
Merge order	Name	Layer version	Compatible runtimes	Compatible architectures	Version ARN		
1	AWSSDKPandas-Python311	10	python3.11	x86_64	arn:aws:lambda:us-east-1:336392948345:layer:AWSSDKPandas-Python311:1		


Triggers : S3

## Triggers (1) [Info](#)

☐

Trigger

☐

 **S3:** [doordash-landing-pra](#)  
arn:aws:s3:::doordash-landing-pra  
[Details](#)

Lambda Permissions:

Permissions policies (3) [Info](#)

↺

Simulate [↗](#)

Remove

Add permissions ▾

You can attach up to 10 managed policies.

Q Search

Filter by Type

All types ▾

< 1 > ⚙

<input type="checkbox"/>	Policy name <a href="#">↗</a>	Type	Attached entities
<input type="checkbox"/>	<a href="#">AmazonS3FullAccess</a>	AWS managed	13
<input type="checkbox"/>	<a href="#">AmazonSNSFullAccess</a>	AWS managed	2
<input type="checkbox"/>	<a href="#">AWSLambdaBasicExecutionRole-1be0dc...</a>	Customer managed	1

Lambda Function Code:

lambda\_function ×

Execution results ×

Environment Var ×

+

```




1
2 import json
3 import boto3
4 import pandas as pd
5
6
7 def lambda_handler(event, context):
8     # TODO implement
9     print(event)
10    try:
11        sns_client = boto3.client('sns')
12        s3_client = boto3.client('s3')
13        sns_arn = 'arn:aws:sns:us-east-1:590183878198:doordash-sns'
14        bucket = event["Records"][0]["s3"]["bucket"]["name"]
15        file = event["Records"][0]["s3"]["object"]["key"]
16        obj = s3_client.get_object(Bucket = bucket, Key=file)
17
18        data = obj['Body'].read().decode("utf-8")
19
20
21        df = pd.read_json(data)
22
23        filtered_df = df[df['status'] == 'delivered']
24        fjson = filtered_df.to_json(orient = 'records')
25        print(filtered_df)
26        target_file = 'doordash.json'
27        target_bucket = 'doordash-target-pra'
28        s3_client.put_object(
29            Body=fjson,
30            Bucket=target_bucket,
31            Key=target_file
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",
36            TargetArn=sns_arn,
37            Message=message,

```

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

## CI-DS using AWS Codebuild:


Github repository created with name doordash\_git

 buildspec.yml	Commit cicd changes req	last week
 lambda_function.py	commit comment	3 weeks ago
 requirement.txt	Added doordash files	3 weeks ago

Source Github repository

## Primary source webhook events [Info](#)

Add filter group

Webhook - *optional* [Info](#) 

☒ Rebuild every time a code change is pushed to this repository

Build type

☒ **Single build**  
Triggers single build

☐ **Batch build**  
Triggers multiple builds as single execution

☐ Rotate webhook secret key

## Webhook event filter groups


A build is triggered if any filter group evaluates to true, which occurs when all the filters in the group evaluate to true.

### Filter group 1

Remove filter group

Event type - *optional*

Add one or more webhook event filter groups to specify which events trigger a new build. If you do not add a webhook event filter group, then a new build is triggered every time a code change is pushed to your repository.

PULL\_REQUEST\_MERGED 

## Buildspec

Current buildspec

Using the buildspec.yml in the source code root directory

Build specifications

☐ **Insert build commands**  
Store build commands as build project configuration

☒ **Use a buildspec file**  
Store build commands in a YAML-formatted buildspec file

Buildspec name - *optional*

By default, CodeBuild looks for a file named buildspec.yml in the source code root directory. If your buildspec file uses a different name or location, enter its path from the source root here (for example, buildspec-two.yml or configuration/buildspec.yml).

buildspec.yml

Buildspec.yml:

doordash\_git / buildspec.yml

Joshi Commit ckd changes req 7cab919 · last week

Code Blame 26 lines (25 loc) · 820 Bytes Code 55% faster with GitHub Copilot Raw Copy Download Edit

```
1 version: 0.2
2 phases:
3   install:
4     runtime-versions:
5       python: 3.11
6     commands:
7       - echo "Installing dependencies..."
8       - pip install -r requirement.txt -t lib
9   pre_build:
10    commands:
11      - echo "Nothing to do in the pre_build phase"
12   build:
13    commands:
14      - echo " new Zipping deployment package..."
15      - cd lib
16      - zip -r9 ../deployment_package.zip .
17      - cd ..
18      - zip -g deployment_package.zip lambda_function.py
19   post_build:
20    commands:
21      - echo "Uploading to S3..."
22      - aws s3 cp deployment_package.zip s3://doordash-lambda-zip-cb/
23      - echo "Updating Lambda function via S3..."
24      - aws lambda update-function-code --function-name doordash-lambda-cidd --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:
5185
```