Lambda Layer

AWS Lambda layers allow the Lambda functions to import additional code or data without including that additional code in the deployment package.

A **layer** is a zip file that contains all the additional code. A layer can contain some third-party libraries, custom runtimes, or data (config Files).

Re-use code across multiple functions

Your Lambda cod looks simpler by moving reusable code to the layer.

Easy to maintain and maintains consistency in response to the orchestrator tools.

Requirement was multiple lambda functions fetches files from different sources . There has to be common library that can be used to move the fetched data to s3.

```
> Users > k.thulasi.kumar > OneDrive - Accenture > Desktop > ByteByteGo > Lambda Layer > python > 🍦 Move
     def upload_file(file_name, bucket, object_name=None):
         """Upload a file to an S3 bucket
         :param file_name: File to upload
         :param bucket: Bucket to upload to
         :param object_name: S3 object name. If not specified then file_name is used
         :return: True if file was uploaded, else False
10
         # If S3 object_name was not specified, use file_name
         if object name is None:
12
             object_name = os.path.basename(file_name)
<u>1</u>3
4
         # Upload the file
.5
         s3_client = boto3.client('s3')
<u>16</u>
١7
            response = s3_client.upload_file(file_name, bucket, object_name)
8.
         except ClientError as e:
_9
             logging.error(e)
             return False
20
         return True
```

We need first download requests from python module.

mkdir python

pip install requests -t .

Now add the custom library

```
ec2-user@ip-172-31-80-40 python]$ ls
[ovefileS3.py bin certifi charset normalizer idna requests urllib3
```

Cd ...

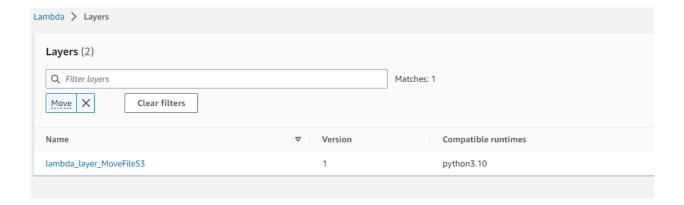
zip -r lambda-package.zip python

```
[ec2-user@ip-172-31-80-40 ~]$ ls lambda-package.zip python
```

Move the zip file to s3

```
[ec2-user@ip-172-31-80-40 ~]$ aws s3 cp lambda-package.zip s3://aja-s3/upload: ./lambda-package.zip to s3://aja-s3/lambda-package.zip
```

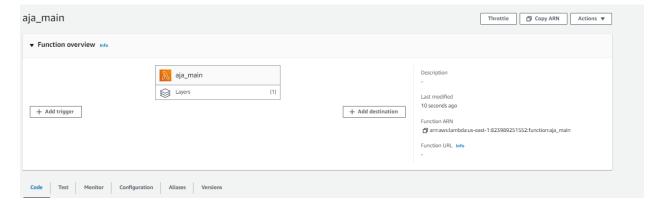
Publish Lambda Layer.



Create Lambda function.

Import our custom library and invoke to move the generated file to s3.

```
lambda_function × Execution results × +
1 import json
  import MovefileS3
import os
import boto3
  def lambda_handler(event, context):
    # TODO implement
6
7
       1
4
         </head><body>
<h3>Demo HTML</h3>
          <br><br><br>>
0
          <form action="/get">
1
            <br>
           Name: <input type="text" name="name">
:3
           <hr>>
4
           Address: <input type="text" name="address">
<input type="submit" value="Submit">
6
7
8
          </form>
        </body></html>"""
        f.write(html_content)
9
0
        f.close()
        respon = MovefileS3.upload_file(save_path,'aja-s3','ola.html')
1 2 3 4 5 6
        return {
    'statusCode': 200,
            'body': json.dumps('Hello from Lambda!')
```



File moved to S3.

