

Step Functions Management C x Learner Lab x InvokeSHA256Lambda - Lamb x Courses / 2023-Summer / csci x +

us-east-1.console.aws.amazon.com/lambda/home?region=us-east-1#/functions/InvokeSHA256Lambda?tab=code

5408_Assignment... CodergateUI

aws Services Search [Option+S] N. Virginia voclabs/user2581676=lm657206@dal.ca @ 2094-7466-5153

EC2

Code source Info

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Go to Anything (96 P)

Environment

- InvokeSHA256Lam
- bin
- certifi
- certifi-2023.5.7.dist-info
- charset_normalizer
- charset_normalizer-3.2.0
- idna
- idna-3.4.dist-info
- New Folder
- requests
- requests-2.31.0.dist-info
- urllib3
- urllib3-2.0.4.dist-info
- lambda_function.py
- lambda_package1.zip
- requirements.txt

```
1 import json
2 import hashlib
3 import requests
4
5 def lambda_handler(event, context):
6     action = event['input']['action'] # Access the 'action' field from the nested 'input'
7     value = event['input']['value'] # Access the 'value' field from the nested 'input'
8
9     if action == 'sha256':
10         hashed_value = hashlib.sha256(value.encode('utf-8')).hexdigest()
11
12         response = {
13             'banner': "800934899",
14             'result': hashed_value,
15             'arn': "arn:aws:lambda:us-east-1:209474665153:function:InvokeSHA256Lambda",
16             'action': 'sha256',
17             'value': value
18         }
19
20         # Send POST request to the specified URL
21         url = "https://v7qaxwoyrb.execute-api.us-east-1.amazonaws.com/default/end"
22         headers = {'Content-Type': 'application/json'}
23         payload = json.dumps(response)
24
25         try:
26             response = requests.post(url, data=payload, headers=headers)
27             response.raise_for_status() # Raise an exception for non-2xx status codes
28             return response.json() # Return the response from the POST request
29         except requests.exceptions.RequestException as e:
30             return {
31                 'error': str(e) # Return the error message as part of the response
32             }
33         else:
```

9:27 Python Spaces: 4

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Step Functions Management C x Learner Lab x InvokeBcryptLambda - Lamb x Courses / 2023-Summer / csci x +

us-east-1.console.aws.amazon.com/lambda/home?region=us-east-1#/functions/InvokeBcryptLambda?tab=code

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Environment

- InvokeBcryptLamb
- bcrypt
- bcrypt-4.0.1.dist-info
- bin
- certifi
- certifi-2023.5.7.dist-info
- charset_normalizer
- charset_normalizer-3.2.0
- idna
- idna-3.4.dist-info
- requests
- requests-2.31.0.dist-info
- urllib3
- urllib3-2.0.4.dist-info
- lambda_function.py

```
1 import json
2 import bcrypt
3 import requests
4
5 def lambda_handler(event, context):
6     action = event['input']['action'] # Access the 'action' field from the nested 'input'
7     value = event['input']['value'] # Access the 'value' field from the nested 'input'
8
9     if action == 'bcrypt':
10         # Hash the input value using bcrypt
11         hashed_value = bcrypt.hashpw(value.encode('utf-8'), bcrypt.gensalt()).decode('utf-8')
12
13         response = {
14             'banner': "800934899",
15             'result': hashed_value,
16             'arn': "arn:aws:lambda:us-east-1:209474665153:function:InvokeBcryptLambda",
17             'action': 'bcrypt',
18             'value': value
19         }
20
21         # Construct the data to be sent in the POST request
22         post_data = {
23             "banner": response["banner"],
24             "result": response["result"],
25             "arn": response["arn"],
26             "action": response["action"],
27             "value": response["value"]
28         }
29
30         # Send the POST request to the endpoint
31         try:
32             response = requests.post("https://v7qaxwoyrb.execute-api.us-east-1.amazonaws.com/default/end", js
33             response.raise_for_status()
```

9:27 Python Spaces: 4

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Step Functions Management | Learner Lab | InvokeMDSLambda - Lambda | Courses / 2023-Summer / csci | +

us-east-1.console.aws.amazon.com/lambda/home?region=us-east-1#/functions/InvokeMDSLambda?tab=code

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Environment

- InvokeMDSLambda
 - bin
 - certifi
 - certifi-2023.5.7.dist-info
 - charset_normalizer
 - charset_normalizer-3.2.0
 - idna
 - idna-3.4.dist-info
 - requests
 - requests-2.31.0.dist-info
 - urllib3
 - urllib3-2.0.4.dist-info
 - lambda_function.py
 - requirements.txt

```
1 import json
2 import hashlib
3 import requests
4
5 def lambda_handler(event, context):
6     action = event['input']['action'] # Access the 'action' field from the nested 'input'
7     value = event['input']['value'] # Access the 'value' field from the nested 'input'
8
9     if action == 'md5':
10         hashed_value = hashlib.md5(value.encode('utf-8')).hexdigest()
11
12         response = {
13             'banner': "B00934899",
14             'result': hashed_value,
15             'arn': "arn:aws:lambda:us-east-1:209474665153:function:InvokeMDSLambda",
16             'action': 'md5',
17             'value': value
18         }
19
20     # Construct the data to be sent in the POST request
21     post_data = {
22         "banner": response["banner"],
23         "result": response["result"],
24         "arn": response["arn"],
25         "action": response["action"],
26         "value": response["value"]
27     }
28
29     # Send the POST request to the endpoint
30     try:
31         response = requests.post("https://v7qaxwoyrb.execute-api.us-east-1.amazonaws.com/default/end", json=post_data)
32         response.raise_for_status()
33     except requests.exceptions.RequestException as e:
```

1:1 Python Spaces: 4

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us-east-1.console.aws.amazon.com/states/home?region=us-east-1#/statemachines/view/arn:aws:states:us-east-1:209474665153:stateMachine:cloud-a3

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EC2

Step Functions

Executions Logging Definition Aliases Versions Tags

State machines

Activities

Developer resources

- Online learning workshop
- Local Development
- Data flow simulator
- Feature spotlight
- Documentation
- Join our feedback panel

Definition

Export graph Layout

```
23 {
24     "Variable": "$.state",
25     "StringEquals": "InvokeBcryptLambda",
26     "Next": "InvokeBcryptLambda"
27 },
28 "Default": "InvalidActionState"
29 },
30 },
31 "InvokeSHA256Lambda": {
32     "Type": "Task",
33     "Resource": "arn:aws:lambda:us-east-1:209474665153:function:InvokeSHA256Lambda",
34     "End": true
35 },
36 "InvokeMDSLambda": {
37     "Type": "Task",
38     "Resource": "arn:aws:lambda:us-east-1:209474665153:function:InvokeMDSLambda",
39     "End": true
40 },
41 "InvokeBcryptLambda": {
42     "Type": "Task",
43     "Resource": "arn:aws:lambda:us-east-1:209474665153:function:InvokeBcryptLambda",
44     "End": true
45 }
```

```
graph TD
    Start((Start)) --> ProcessEncryption[ProcessEncryption]
    ProcessEncryption --> ChoiceState[ChoiceState]
    ChoiceState --> InvokeSHA256Lambda[InvokeSHA256Lambda]
    ChoiceState --> InvokeMDSLambda[InvokeMDSLambda]
    ChoiceState --> InvokeBcryptLambda[InvokeBcryptLambda]
    ChoiceState --> InvalidActionState[InvalidActionState]
    InvokeSHA256Lambda --> End((End))
    InvokeMDSLambda --> End
    InvokeBcryptLambda --> End
```

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Step Functions Management Console - Definition view

URL: us-east-1.console.aws.amazon.com/states/home?region=us-east-1#/statemachines/view/arn:aws:states:us-east-1:209474665153:stateMachine:cloud-a3

Navigation: Executions | Logging | **Definition** | Aliases | Versions | Tags

Left sidebar: State machines, Activities, Developer resources (Online learning workshop, Local Development, Data flow simulator, Feature spotlight, Documentation), Join our feedback panel.

Definition

```
1 {
2   "Comment": "Hashing Workflow",
3   "StartAt": "ProcessEncryption",
4   "States": {
5     "ProcessEncryption": {
6       "Type": "Task",
7       "Resource": "arn:aws:lambda:us-east-1:209474665153:function:process-encryption",
8       "Next": "ChoiceState"
9     },
10    "ChoiceState": {
11      "Type": "Choice",
12      "Choices": [
13        {
14          "Variable": "$.state",
15          "StringEquals": "InvokeSHA256Lambda",
16          "Next": "InvokeSHA256Lambda"
17        },
18        {
19          "Variable": "$.state",
20          "StringEquals": "InvokeMD5Lambda",
21          "Next": "InvokeMD5Lambda"
22        },
23        {
24          "Variable": "$.state",
```

Graph view: Start → ProcessEncryption → ChoiceState → (InvokeSHA256Lambda, InvokeMD5Lambda, InvokeBcryptLambda, InvalidActionState) → End

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Step Functions Management Console - Definition view

URL: us-east-1.console.aws.amazon.com/states/home?region=us-east-1#/statemachines/view/arn:aws:states:us-east-1:209474665153:stateMachine:cloud-a3

Navigation: Executions | Logging | **Definition** | Aliases | Versions | Tags

Left sidebar: State machines, Activities, Developer resources (Online learning workshop, Local Development, Data flow simulator, Feature spotlight, Documentation), Join our feedback panel.

Definition

```
33   "Resource": "arn:aws:lambda:us-east-1:209474665153:function:InvokeSHA256Lambda",
34   "End": true
35 },
36 "InvokeMD5Lambda": {
37   "Type": "Task",
38   "Resource": "arn:aws:lambda:us-east-1:209474665153:function:InvokeMD5Lambda",
39   "End": true
40 },
41 "InvokeBcryptLambda": {
42   "Type": "Task",
43   "Resource": "arn:aws:lambda:us-east-1:209474665153:function:InvokeBcryptLambda",
44   "End": true
45 },
46 "InvalidActionState": {
47   "Type": "Fail",
48   "Error": "InvalidAction",
49   "Cause": "Invalid action value in input JSON"
50 }
51 }
52 }
```

Graph view: Start → ProcessEncryption → ChoiceState → (InvokeSHA256Lambda, InvokeMD5Lambda, InvokeBcryptLambda, InvalidActionState) → End

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Executions: ScriptExecution-S...Learner LabCourses / 2023-Summer / csci...+

us-east-1.console.aws.amazon.com/states/home?region=us-east-1#/v2/executions/details/arn:aws:states:us-east-1:209474665153:execution:cloud-a3:ScriptExec...5408_Assignment...CoderGateUI

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X-Ray trace map Learn more1-64ba8b5b-49fcca1d48bc28b75a4fa92c

Graph viewTable view

Graph viewActions

Start

ProcessEncryption

ChoiceState

InvokeSHA256Lambda

InvokeMD5Lambda

InvokeBcryptLambda

InvalidActionState

End

In progressFailedCaught errorCanceledSucceeded

Step Detail

Choose a step to view its details.

CloudShellFeedbackLanguage

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