Srushti Sanjay Sakharkar   TEITB   ADL exp. 11   Roll No. 38
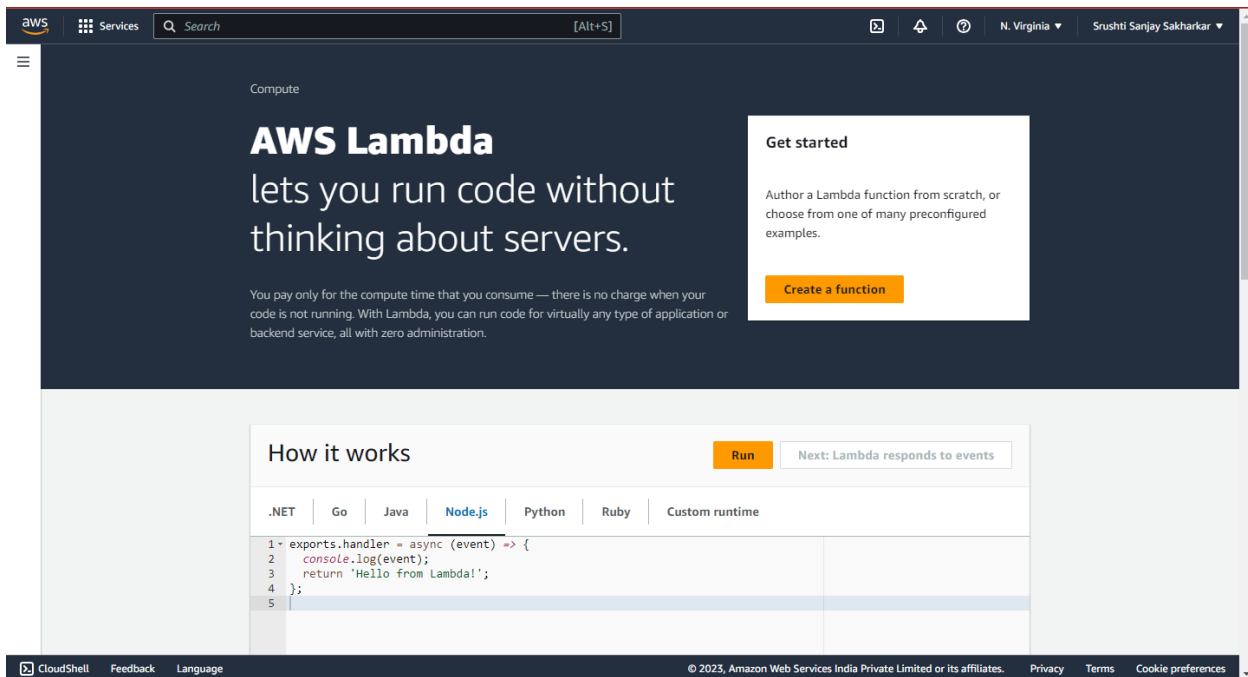
- Enter Lambda service from console

- Select a Lambda Blueprint
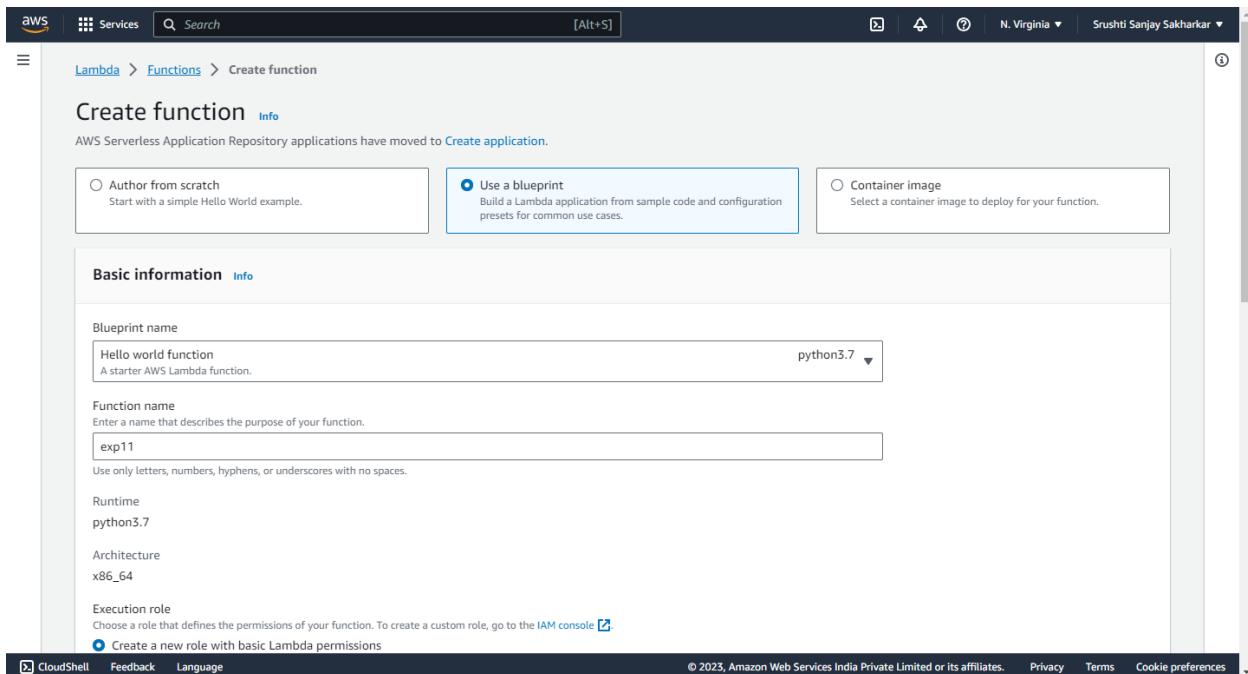
- Configure and create Lambda function


```
1  import json
2
3  print('Loading function')
4
5
6  def lambda_handler(event, context):
7      #print("Received event: " + json.dumps(event, indent=2))
8      print("value1 = " + event['key1'])
9      print("value2 = " + event['key2'])
10     print("value3 = " + event['key3'])
11     return event['key1']  # Echo back the first key value
12     #raise Exception('Something went wrong')
13
```
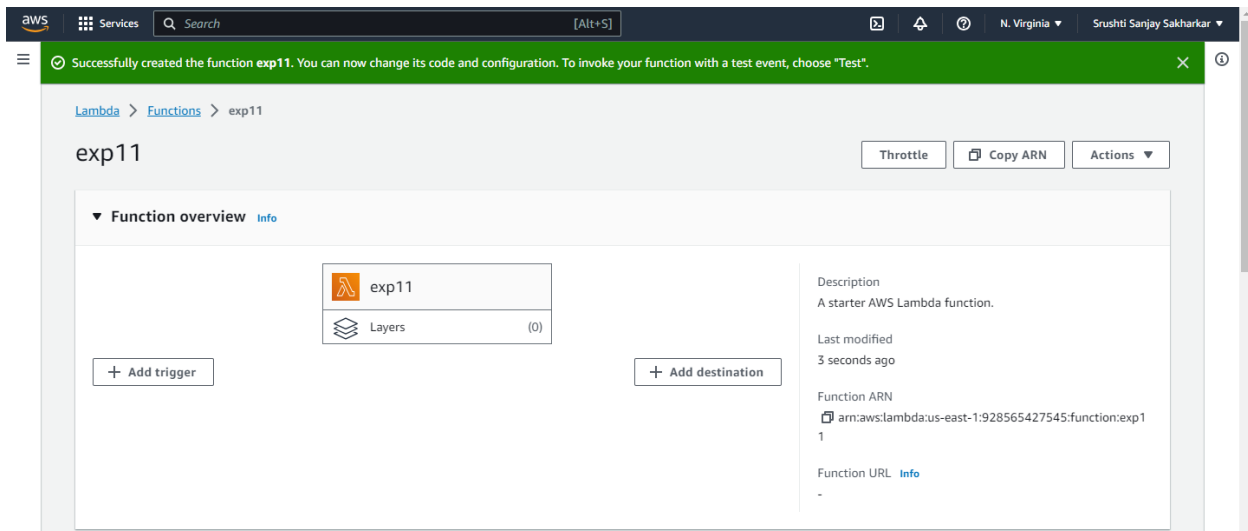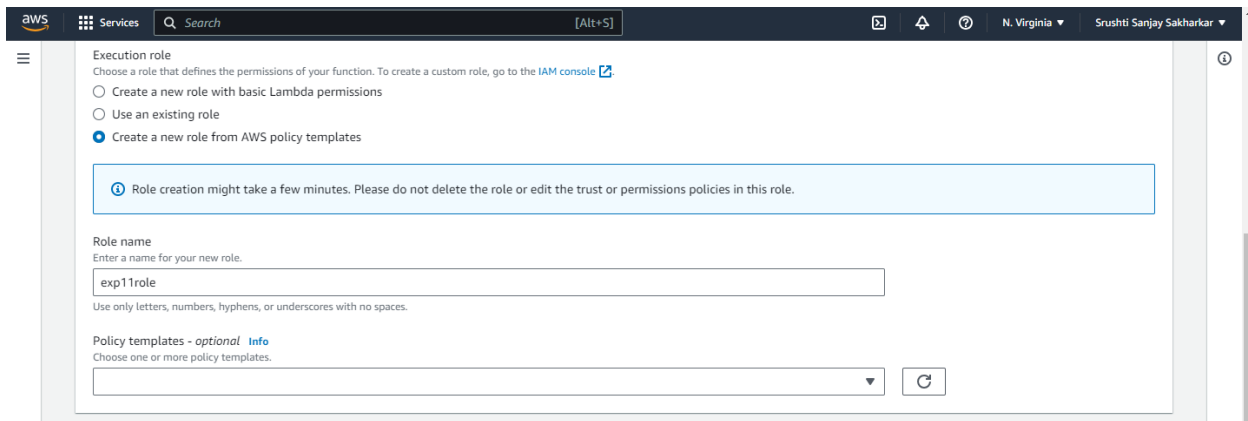
- Invoke Lambda function and verify results

Code source Info

File   Edit   Find   View   Go   Tools   Window   Test   ▼   Deploy

Go to Anything (Ctrl-P)   lambda_function ×   Environment Vari ×   ⊕

▼ exp11 - /
  lambda_function.py

```
1  import json
2
3  print('Loading function')
4
5
6  def lambda_handler(event, context):
7      #print("Received event: " + json.dumps(event, indent=2))
8      print("value1 = " + event['key1'])
9      print("value2 = " + event['key2'])
10     print("value3 = " + event['key3'])
11     return event['key1']  # Echo back the first key value
12     #raise Exception('Something went wrong')
13
```

Configure test event   ✕

A test event is a JSON object that mocks the structure of requests emitted by AWS services to invoke a Lambda function. Use it to see the function's invocation result.

To invoke your function without saving an event, configure the JSON event, then choose Test.

Test event action

⦿ Create new event   ⦾ Edit saved event

Event name

event1

Maximum of 25 characters consisting of letters, numbers, dots, hyphens and underscores.

Event sharing settings

⦿ Private

This event is only available in the Lambda console and to the event creator. You can configure a total of 10. Learn more ☒

⦾ Shareable

This event is available to IAM users within the same account who have permissions to access and use shareable events. Learn more ☒

Template - *optional*

hello-world ▼

Event JSON   Format JSON

```
1 ▾ {
2      "key1": "Srushti Sanjay Sakharkar",
3      "key2": "Hello World",
4      "key3": "Roll No. 38"
5   }
```

lambda_function ×   Environment Vari ×   Execution result: ×   ⊕

▼ Execution results   Status: Succeeded | Max memory used: 36 MB | Time: 2.02 ms
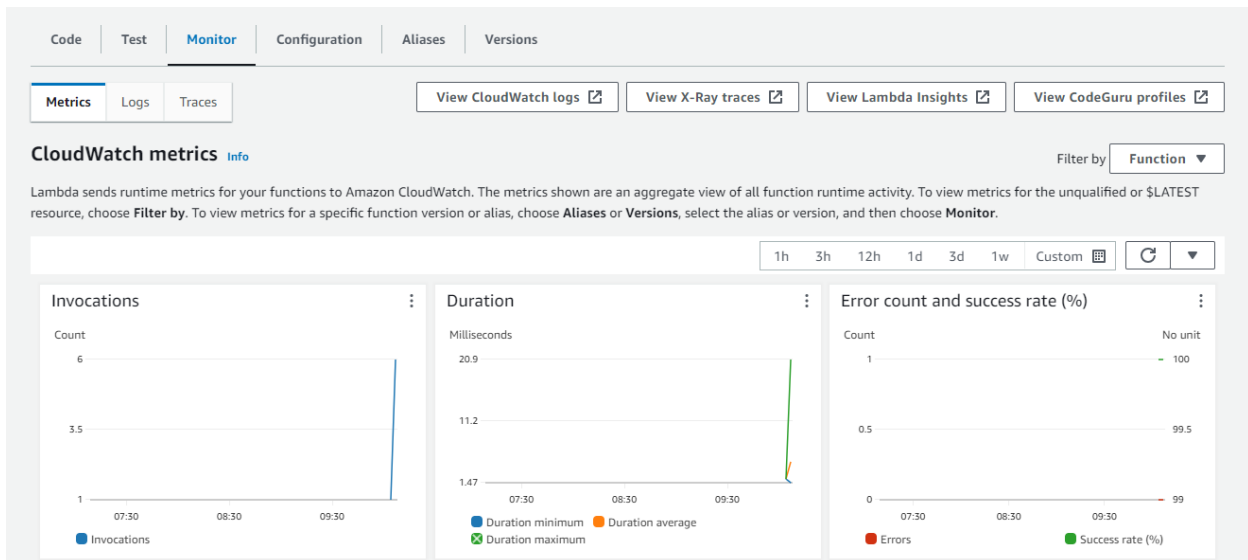
Test Event Name
event1

Response
"Srushti Sanjay Sakharkar"

Function Logs
Loading function
START RequestId: dc3712a0-02a6-47cb-b490-866c60678898 Version: $LATEST
value1 = Srushti Sanjay Sakharkar
value2 = Hello World
value3 = Roll No. 38
END RequestId: dc3712a0-02a6-47cb-b490-866c60678898
REPORT RequestId: dc3712a0-02a6-47cb-b490-866c60678898 Duration: 2.02 ms Billed Duration: 3 ms Memory Size: 128 MB Max Memory Used: 36 MB Init Durati

Request ID
dc3712a0-02a6-47cb-b490-866c60678898

- ● AWS Lambda automatically monitors Lambda functions and reports metrics.

Code   Test   **Monitor**   Configuration   Aliases   Versions

Metrics   Logs   Traces   View CloudWatch logs ↗   View X-Ray traces ↗   View Lambda Insights ↗   View CodeGuru profiles ↗

CloudWatch metrics Info   Filter by   Function ▼

Lambda sends runtime metrics for your functions to Amazon CloudWatch. The metrics shown are an aggregate view of all function runtime activity. To view metrics for the unqualified or $LATEST resource, choose **Filter by**. To view metrics for a specific function version or alias, choose **Aliases** or **Versions**, select the alias or version, and then choose **Monitor**.

1h 3h 12h 1d 3d 1w Custom ▦ ↻ ▼

Invocations	Duration	Error count and success rate (%)
Count	Milliseconds	Count / No unit
6	20.9	1 / 100
3.5	11.2	0.5 / 99.5
1	1.47	0 / 99
07:30 08:30 09:30	07:30 08:30 09:30	07:30 08:30 09:30
● Invocations	● Duration minimum ● Duration average ⊗ Duration maximum	● Errors ● Success rate (%)

Configure test event   ✕

A test event is a JSON object that mocks the structure of requests emitted by AWS services to invoke a Lambda function. Use it to see the function's invocation result.

To invoke your function without saving an event, modify the event, then choose Test. Lambda uses the modified event to invoke your function, but does not overwrite the original event until you choose Save changes.

Test event action

○ Create new event   ● Edit saved event

Event name

| event1 | ▼ | ↻ | Delete |

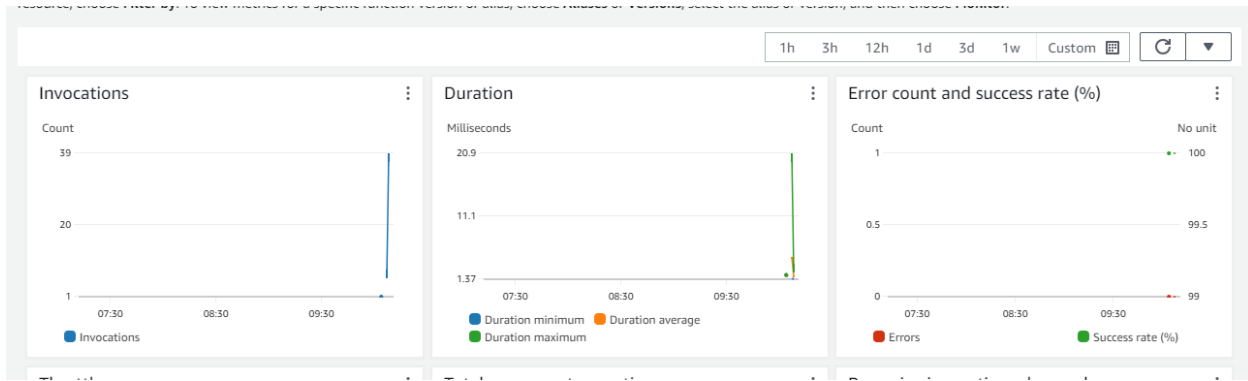**Event JSON**   Format JSON

```
1  {
2    "": "Srushti Sanjay Sakharkar",
3    "key2": "Hello World",
4    "key3": "Roll No. 38"
5  }
```

lambda_function ✕   Environment Var ✕   Execution result ✕   ⊕

▼ Execution results   Status: **Failed** | Max memory used: 38 MB | Time: 2.31 ms

Test Event Name
event1

Response
```
{
  "errorMessage": "'key1'",
  "errorType": "KeyError",
  "stackTrace": [
    "  File \"/var/task/lambda_function.py\", line 8, in lambda_handler\n    print(\"value1 = \" + event['key1'])\n"
  ]
}
```

Function Logs
```
START RequestId: 9a69d063-4e1e-49c7-a6cb-f00efd0beab6 Version: $LATEST
[ERROR] KeyError: 'key1'
Traceback (most recent call last):
··File "/var/task/lambda_function.py", line 8, in lambda_handler
····print("value1 = " + event['key1'])
END RequestId: 9a69d063-4e1e-49c7-a6cb-f00efd0beab6
REPORT RequestId: 9a69d063-4e1e-49c7-a6cb-f00efd0beab6  Duration: 2.31 ms   Billed Duration: 3 ms   Memory Size: 128 MB Max Memory Used: 38 MB
```

Request ID
9a69d063-4e1e-49c7-a6cb-f00efd0beab6

resource, choose **Filter by.** To view metrics for a specific function version or alias, choose **Aliases** or **Versions**, select the alias or version, and then choose **Monitor.**

| | 1h | 3h | 12h | 1d | 3d | 1w | Custom ▦ | | ↻ | ▾ |

Invocations ⋮

Count

39

20

1

07:30   08:30   09:30

● Invocations

Duration ⋮

Milliseconds

20.9

11.1

1.37

07:30   08:30   09:30

● Duration minimum ● Duration average
● Duration maximum

Error count and success rate (%) ⋮

Count   No unit

1   100

0.5   99.5

0   99

07:30   08:30   09:30

● Errors   ● Success rate (%)

- ● Clean up Lambda function

Lambda 〉 Functions

Functions (1/1)   Last fetched 3 seconds ago   ↻   Actions ▲   **Create function**

🔍 Filter by tags and attributes or search by keyword

View details

Test

〈 1 〉 ⚙

☑	Function name ▽	Description ▽	Package type ▽	R	Delete	Last modified ▽
☑	exp11	A starter AWS Lambda function.	Zip	Python 3.7		18 minutes ago

IAM 〉 Roles

Roles (Selected 1/3) Info   ↻ Delete **Create role**

An IAM role is an identity you can create that has specific permissions with credentials that are valid for short durations. Roles can be assumed by entities that you trust.

🔍 Search   〈 1 〉 ⚙

☑	Role name ▽	Trusted entities	Last activity ▽
☐	AWSServiceRoleForSupport	AWS Service: support (Service-Linked Role)	-
☐	AWSServiceRoleForTrustedAdvisor	AWS Service: trustedadvisor (Service-Linked Role)	-
☑	exp11role	AWS Service: lambda	-

Roles Anywhere Info   Manage

Authenticate your non AWS workloads and securely provide access to AWS services.