



AWS Lambda Greetings Project

1. In this lab we are going to make use of AWS lambda to create a greetings lambda function.
2. First, create a folder and open it using the VS code. Then you need to create a commands text file, an event.json file, and an index.js file.
3. The event.json file contains the code to invoke our lambda function.
4. The index.js file contains our function code. The commands text file contains all the necessary steps to commands which we will use in this lab.

The screenshot shows the VS Code interface with the following details:

- Folders:** AWS LAM...
- Files:** commands.txt, event.json, index.js
- index.js:** The code is as follows:

```
var days = ['Monday', 'Tuesday', 'Wednesday', 'Thursday', 'Friday', 'Saturday', 'Sunday'];
var times = ['morning', 'afternoon', 'evening', 'night', 'day'];

exports.handler = async (event) => {
    console.log('Received event:', JSON.stringify(event, null, 2));

    // parse the input values
    let name = event.name === undefined ? 'you' : event.name;
    let city = event.city === undefined ? 'World' : event.city;
    let time = times.indexOf(event.time)<0 ? 'day' : event.time;
    let day = days.indexOf(event.day)<0 ? null : event.day;

    // generate greeting message
    let greeting = 'Good ' + time + ', ' + name + ' of ' + city + '. ' + 'Happy ' + day + '!';

    // Log and return back message
    console.log('Message: ' + greeting);

    return greeting;
}
```

5. Save all the files and now we are going to create our lambda function. For that first, we need to zip the index.js file. Using the below command we have zipped our file.

```
PS D:\AWS Serveless\AWS Lambda Greetings Project> Compress-Archive index.js function.zip
PS D:\AWS Serveless\AWS Lambda Greetings Project>
```

6. By executing the command shown below we got the ARN of our role which we will use while creating the function.

```
PS D:\AWS Serveless\AWS Lambda Greetings Project> aws iam get-role --role-name lambda-exec
Role:
Arn: arn:aws:iam::878893308172:role/lambda-exec
AssumeRolePolicyDocument:
Statement:
- Action: sts:AssumeRole
  Effect: Allow
  Principal:
    Service: lambda.amazonaws.com
Version: '2012-10-17'
CreateDate: '2024-11-12T08:14:46+00:00'
```

7. Now we just need to run the create lambda function command. Below you can see that our function has been created.

```

PS D:\AWS Serveless\AWS Lambda Greetings Project> aws lambda create-function \
>>      --function-name greeting \
>>      --runtime nodejs18.x \
>>      --zip-file fileb://function.zip \
>>      --handler index.handler \
>>      --role arn:aws:iam::878893308172:role/lambda-exec
Architectures:
- x86_64
CodeSha256: xNETG4GBqJjFkmfogpGkb13o+fbeIN+Xu2M7kKbkJyM=
CodeSize: 511
Description: ''
EphemeralStorage:
  Size: 512
FunctionArn: arn:aws:lambda:us-east-1:878893308172:function:greeting
FunctionName: greeting
Handler: index.handler
LastModified: 2024-11-13T10:27:55.969+0000
LoggingConfig:
  LogFormat: Text
  LogGroup: /aws/lambda/greeting
MemorySize: 128
PackageType: Zip
RevisionId: 00a034c2-9b9d-40e5-a5c0-6ec5d8c1541d

```

8. From the console too we can see that our function has been created.

Functions (1)					
	Function name	Description	Package type	Runtime	Last modified
<input checked="" type="checkbox"/>	greeting	-	Zip	Node.js 18.x	34 seconds ago

9. Now we just need to run the invoke command. Below you can see that we got status code 200 which means that our function has been invoked successfully.

```

PS D:\AWS Serveless\AWS Lambda Greetings Project> aws lambda invoke \
>>      --function-name greeting \
>>      --cli-binary-format raw-in-base64-out \
>>      --payload file://event.json \
>>      response.json
>>
ExecutedVersion: $LATEST
StatusCode: 200

○ PS D:\AWS Serveless\AWS Lambda Greetings Project> █

```

10. If we open the response file then we can see that we have a response.

```

commands.txt ● response.json X
response.json
1   "Good day, Cloudfreaks of Delhi. Happy Wednesday !"

```

11. If you go to CloudWatch logs for your greeting function you will see the log stream for it and the data in it.

Timestamp	Message
2024-11-13T15:59:27.447+05:30	INIT_START Runtime Version: nodejs:18.v49 Runtime Version ARN: arn:aws:lambda:us-east-1:runtime:13821268cdb8b1fd3647b6b7f...
2024-11-13T15:59:27.626+05:30	START RequestId: f6c17e12-9c68-4abb-b2f7-f01a0a798fbe Version: \$LATEST
2024-11-13T15:59:27.627+05:30	2024-11-13T10:29:27.627Z f6c17e12-9c68-4abb-b2f7-f01a0a798fbe INFO Received event: { "name": "Cloudfreaks", "city": "Delhi..." 2024-11-13T10:29:27.627Z f6c17e12-9c68-4abb-b2f7-f01a0a798fbe INFO Received event: { "name": "Cloudfreaks", "city": "Delhi", "time": "Morning", "day": "Wednesday" } 2024-11-13T15:59:27.628+05:30 2024-11-13T10:29:27.628Z f6c17e12-9c68-4abb-b2f7-f01a0a798fbe INFO Message: Good day, Cloudfreaks of Delhi. Happy Wednesday ! 2024-11-13T10:29:27.628Z f6c17e12-9c68-4abb-b2f7-f01a0a798fbe INFO Message: Good day, Cloudfreaks of Delhi. Happy Wednesday !
2024-11-13T15:59:27.635+05:30	END RequestId: f6c17e12-9c68-4abb-b2f7-f01a0a798fbe
2024-11-13T15:59:27.635+05:30	REPORT RequestId: f6c17e12-9c68-4abb-b2f7-f01a0a798fbe Duration: 9.57 ms Billed Duration: 10 ms Memory Size: 128 MB Max Me...

12. Once you are done then you can delete your function.