

Project - Deploy web application with Lambda, API Gateway & DynamoDB.

In this Project we are using 3 components ^{Primarily}

- 1) Dynamodb - For Backend storage database
- 2) Lambda - It acts as a ^{web} ~~Backend~~ service
- 3) API Gateway - It acts as a Frontend.

The customer trying to access my application
the request will come to API gateway - And
the API gateway ^{processes} to Lambda - And to
get information in Backend Dynamodb.

Practical

Create IAM role - AWS Service (1)

- Lambda (use case)

→ Next ^{Search as Basic}

Permissions - ^{(AWS -} Lambda Basic Execution role - select
me to write logs

Search Dynamo DB - (2) ^{AWS -} DynamoDB full access - select it

~~Over~~ Amazon DynamoDB full access.

~~Over~~ If any issues then go for it.

Simply associate with - Administrator access.

⇒ Next.

Name

⇒ Next Create Role.

② Go for Lambda

- Create Function

Name [vanusha]

Runtime [Python 3.8] - we don't have 3.8, so 3.9

Execution Role - use an existing role [lambda].

In change
Default settings.

=> Create Function.

Now, we have to change the code.

So, we downloaded the Code - .zip file -

There it contains 3 files.

1) Contact.us page

When we're our customer going to access they'll get this page only first.

2) Success.html

After that contact & data get success - if

Immediately loads success.html page.

3) Lambda-function.py

If there's an error of, we are having any errors.

=> What Lambda functions do - act as a simple server

It serves contact.html page whenever our customer sends requests.

Now, zip all file - computes pt.

Contact, lambda, success

[We can also upload this file for S3 bucket & we can get location]

Now, continue Lambda function -

- Go for upload

↓
Zip file

- upload the Zip file

- click on Open

- Save it.

⇒ Now, the all files appears.

Keep - Contact, lambda, Success.html function.

That macosx delete pt.

⇒ Lambda completed.

Now, Go for DynamoDB.

③

→ Create table.

- Name - [should be as in your code]
[which is in Lambda function]

- partition key - email - string.

→ Go for Default settings

⇒ Create Table.

④ Now configure API Gateway ..

-> Select Rest API works over the internet
Click on Build.

-> New API

Name [vanusha19]

=> Create API

Next = We have to Create Methods.

First 1) Get Operation 2) Post Operation Both Methods

First - Go to API

-> Click on Create Method

- Method type [GET] ①

- enable → Lambda proxy integration

- Select region & Lambda function.

=> Create method.

Now we configured GET Method.

Same for - Post method

② Click on create method

Method type [POST]

- Lambda function

- enable → Lambda proxy integration

- region & function

=> Create method

Now, click on Deploy API

- Stage (New Stage)

- dev

→ deploy it

=> we'll get URL - copy it & Paste it on Browser.

OutPut we will get the contact us Lambda function

Contact us ①

First Name

→ Anusha

Last Name

→ V

Email ID

anushav0619@gmail.com

Message

→ Hello, this is Anusha Test Project on AWS Serverless delivery

Submit it - whenever we submit - if the data is stored in backend dynamodb table its going to load.

→ That is another page - It'll show Thanks for trying this project. you can verify data in DynamoDB Table ②

It is a success message, To verify this we need to go DynamoDB.

→ Go face DynamoDB table.

- Go to explore items.

- Go face your table - you'll get your items!

⇒ This what the Architecture of the Project.

Also we can custom Domain name also.

- Go face API Gateway

- Simply take

- Custom Domain Names

- Give Domain name & associate to & create

Domain name & map it on ~~Domain name~~ Route53 too.

⇒ Complete.