ASSIGNMENT 8 - DevOps

Ques: Explain the aws architecture diagram below in detail, and deploy the same aws architecture.
● For this assignment you need to take a look and study the documentation for SAM CLI, you need to deploy a Hello, World application on aws lambda.
● Make sure when you test the lambda url it will respond as Hello, World.

HelloWorldApi
(API Gateway)

GET /

HelloWorldFunction
(AWS Lambda)

Explanation:

The first image represents API Gateway and the second represents the Lambda function. The API Gateway is a trigger for the lambda function invoke. When we use the API endpoint using curl, we are trying to invoke the lambda function (HelloWorldFunction). Which response back with "{"message": "hello world"}" message or any other Status code if something goes wrong. For this, to work we are first installing SAM. Later we are using sam init to make the directory which is holding the template.yaml file initialise. Later we are using the sam build to take it to the build or staged area for ready to deploy. We then use sam deploy to deploy our application in aws account. Where AWS's cloud formation creates the lambda function and API gateway and deploys our code in the lambda function using the artifacts which were built in our build stage.

Proof:

CloudFormation:

Lambda Function:

Assignment-8-HelloWorldFunction-vhuWlCNP214f

Throttle | Copy ARN | Actions ▼

ⓘ This function belongs to an application. Click here to manage it. ✕

▼ **Function overview** Info

Assignment-8-HelloWorldFunction-vhuWlCNP214f

Layers (0)

API Gateway

+ Add trigger

+ Add destination

Description
-

Last modified
25 minutes ago

Function ARN
⧉ arn:aws:lambda:ap-south-1:698512717870:function:Assignment-8-HelloWorldFunction-vhuWlCNP214f

Application
Assignment-8

Function URL Info
-

Final Result:

PROBLEMS   OUTPUT   GITLENS   DEBUG CONSOLE   **TERMINAL**   > zsh - Assignment-8 + ∨ ⬚ 🗑 ⋯ ∧ ✕

```
--------------------------------------------------------------------------------
Outputs
--------------------------------------------------------------------------------
Key                 HelloWorldFunctionIamRole
Description         Implicit IAM Role created for Hello World function
Value               arn:aws:iam::698512717870:role/Assignment-8-HelloWorldFunctionRole-D8GGX5JJEXBQ

Key                 HelloWorldApi
Description         API Gateway endpoint URL for Prod stage for Hello World function
Value               https://qx2cka0ckl.execute-api.ap-south-1.amazonaws.com/Prod/hello/

Key                 HelloWorldFunction
Description         Hello World Lambda Function ARN
Value               arn:aws:lambda:ap-south-1:698512717870:function:Assignment-8-HelloWorldFunction-vhuWlCNP214f
--------------------------------------------------------------------------------

Successfully created/updated stack - Assignment-8 in ap-south-1
⊗ akashchandrasekaran@Akashs-MacBook-Pro Assignment-8 % curl https://<restapiid>.execute-api.ap-south-1.amazonaws.com/Prod/hello/
zsh: no such file or directory: restapiid
⊗ akashchandrasekaran@Akashs-MacBook-Pro Assignment-8 % https://qx2cka0ckl.execute-api.ap-south-1.amazonaws.com/Prod/hello
zsh: no such file or directory: https://qx2cka0ckl.execute-api.ap-south-1.amazonaws.com/Prod/hello
● akashchandrasekaran@Akashs-MacBook-Pro Assignment-8 % curl https://qx2cka0ckl.execute-api.ap-south-1.amazonaws.com/Prod/hello
{"message": "hello world"}
⊗ akashchandrasekaran@Akashs-MacBook-Pro Assignment-8 % https://qx2cka0ckl.execute-api.ap-south-1.amazonaws.com/Prod/hello
zsh: no such file or directory: https://qx2cka0ckl.execute-api.ap-south-1.amazonaws.com/Prod/hello
● akashchandrasekaran@Akashs-MacBook-Pro Assignment-8 % curl https://qx2cka0ckl.execute-api.ap-south-1.amazonaws.com/Prod/hello
{"message": "hello world"}
● akashchandrasekaran@Akashs-MacBook-Pro Assignment-8 % curl https://qx2cka0ckl.execute-api.ap-south-1.amazonaws.com/Prod/hello
{"message": "hello world"}
● akashchandrasekaran@Akashs-MacBook-Pro Assignment-8 % curl https://qx2cka0ckl.execute-api.ap-south-1.amazonaws.com/Prod/hello
{"message": "hello world"}
○ akashchandrasekaran@Akashs-MacBook-Pro Assignment-8 %
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