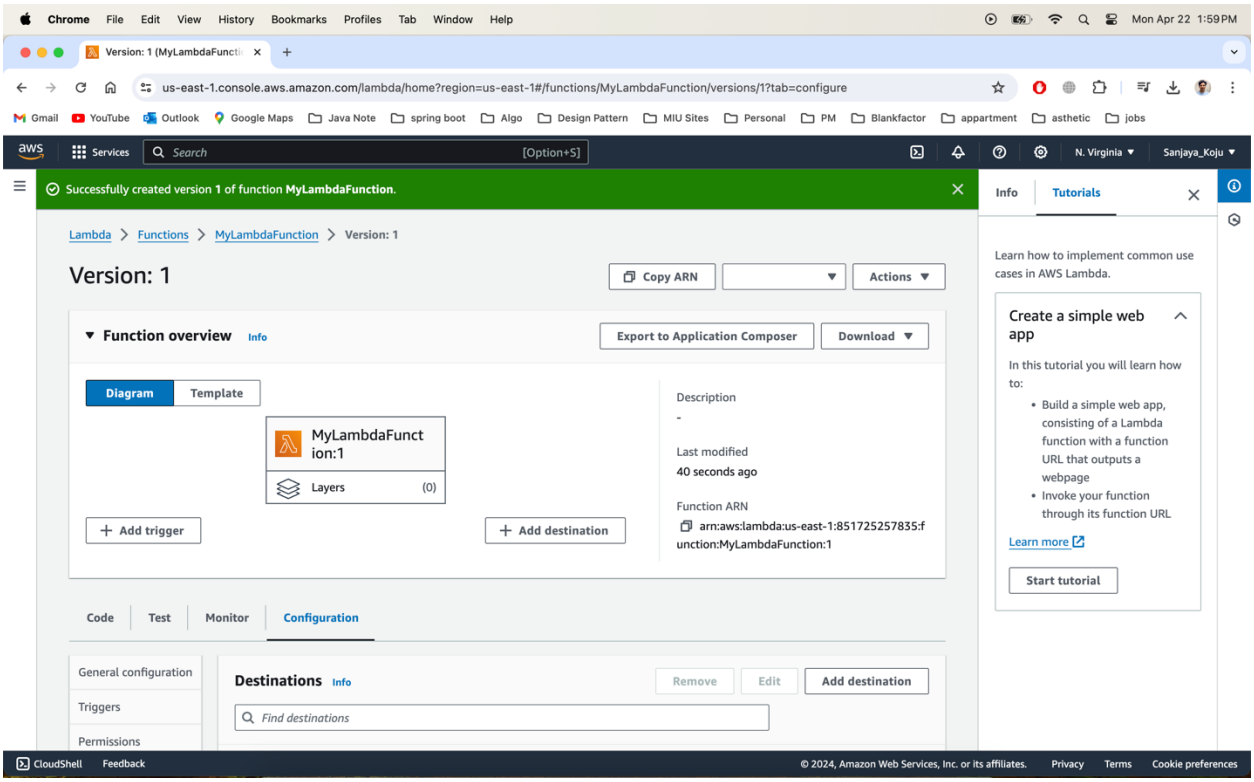
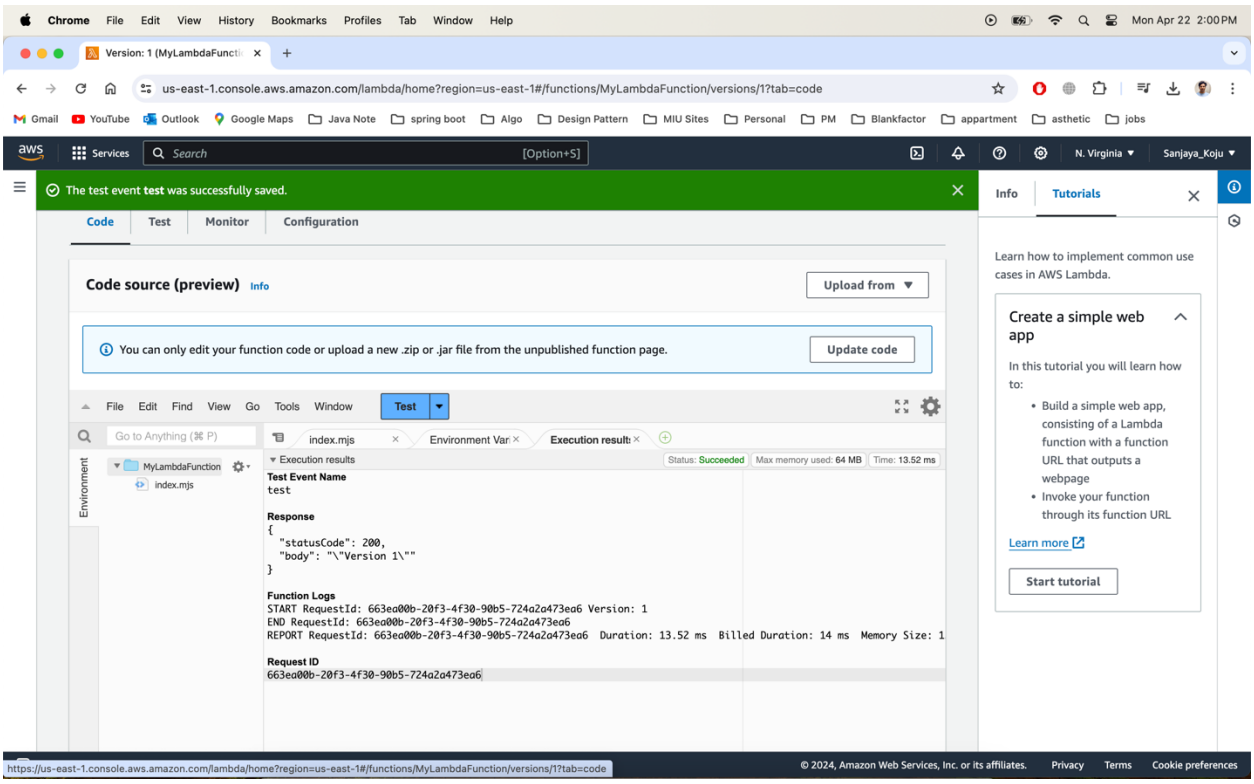
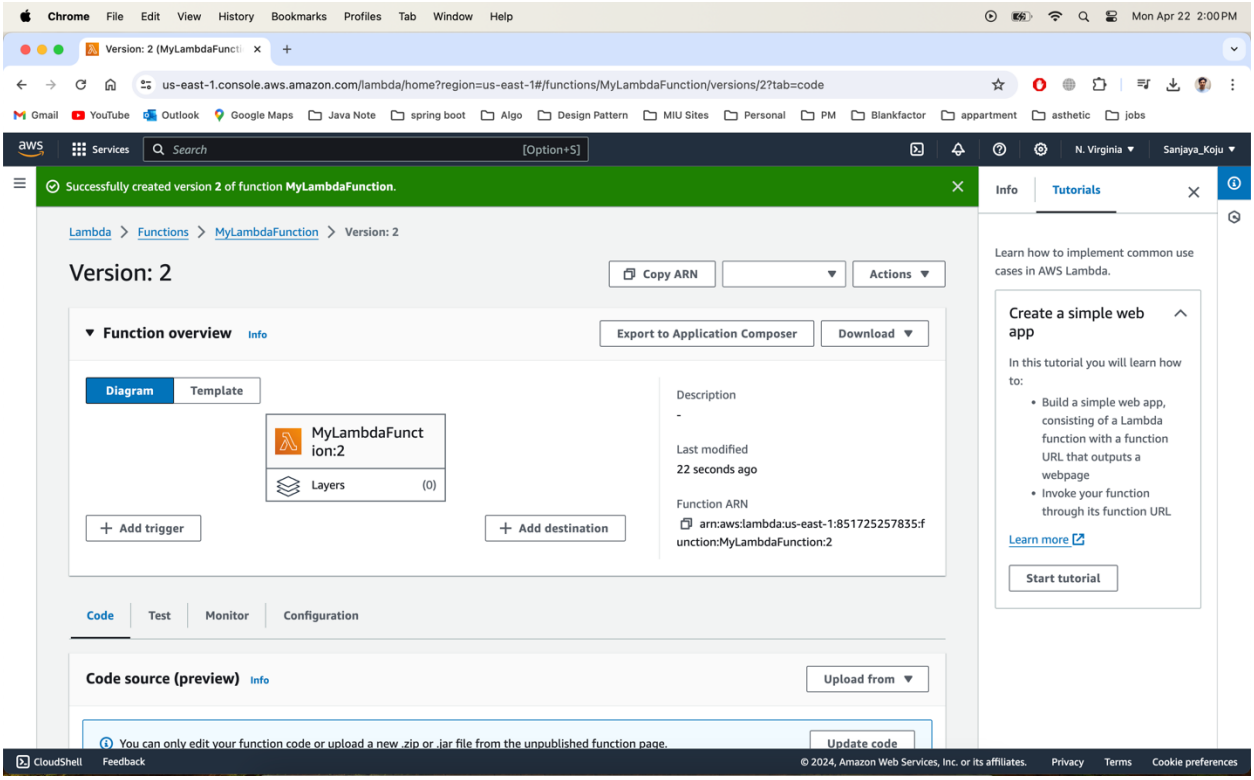
Task 0. Practice version, alias, and weighted (canary) deployment






Chrome File Edit View History Bookmarks Profiles Tab Window Help
Mon Apr 22 2:00 PM
us-east-1.console.aws.amazon.com/lambda/home?region=us-east-1#/functions/MyLambdaFunction/versions/2?tab=code
Services Search [Option+S] N. Virginia Sanjaya_Koju
Successfully created version 2 of function MyLambdaFunction.
Lambda > Functions > MyLambdaFunction > Version: 2
Version: 2
Copy ARN Actions
Function overview Info
Export to Application Composer Download
Diagram Template
MyLambdaFunction:2
Layers (0)
Add trigger Add destination
Description -
Last modified 22 seconds ago
Function ARN arn:aws:lambda:us-east-1:851725257835:function:MyLambdaFunction:2
Code Test Monitor Configuration
Code source (preview) Info
Upload from
You can only edit your function code or upload a new .zip or .jar file from the unpublished function page.
Update code
Info Tutorials
Learn how to implement common use cases in AWS Lambda.
Create a simple web app
In this tutorial you will learn how to:
Build a simple web app, consisting of a Lambda function with a function URL that outputs a webpage
Invoke your function through its function URL
Learn more
Start tutorial
CloudShell Feedback
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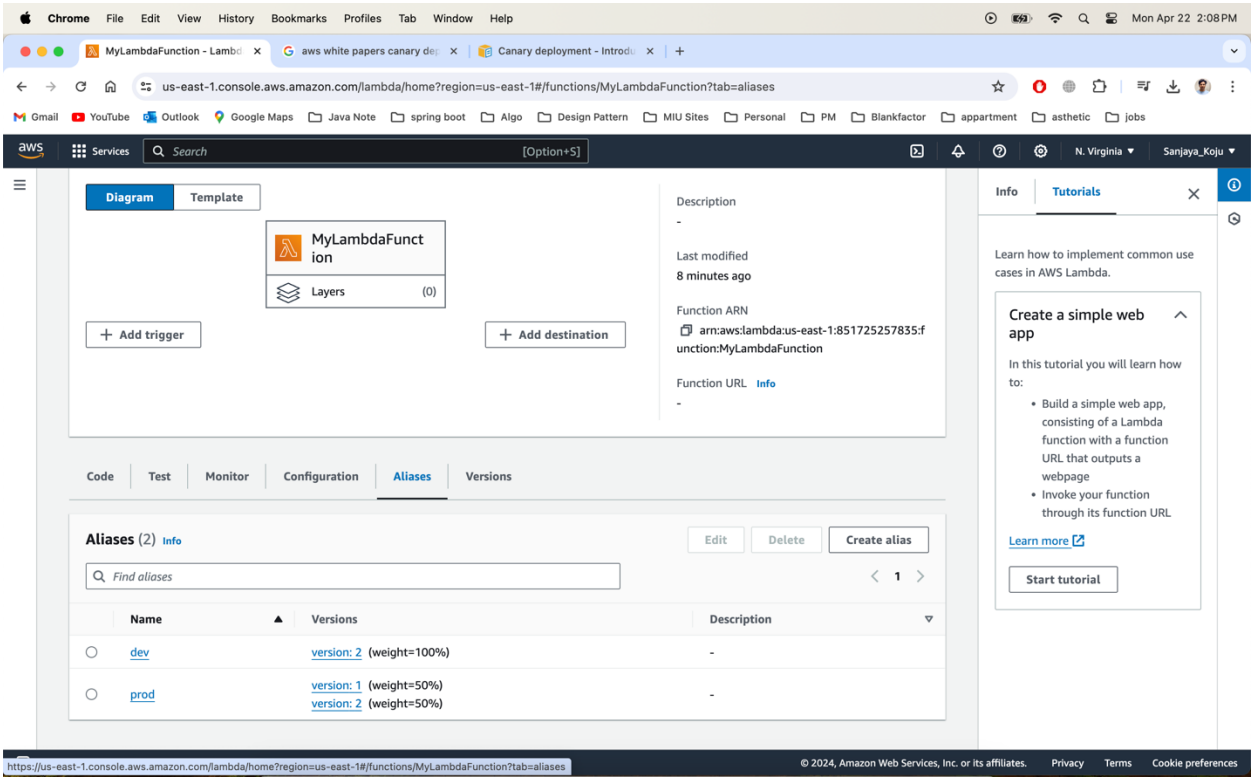
Chrome File Edit View History Bookmarks Profiles Tab Window Help
Mon Apr 22 2:08 PM
us-east-1.console.aws.amazon.com/lambda/home?region=us-east-1#/functions/MyLambdaFunction?tab=aliases
Diagram Template
MyLambdaFunction
Layers (0)
Add trigger Add destination
Description -
Last modified 8 minutes ago
Function ARN arn:aws:lambda:us-east-1:851725257835:function:MyLambdaFunction
Function URL Info -
Code Test Monitor Configuration Aliases Versions
Aliases (2) Info
Edit Delete Create alias
Find aliases
Name Versions Description
dev version: 2 (weight=100%) -
prod version: 1 (weight=50%) version: 2 (weight=50%) -
Info Tutorials
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https://us-east-1.console.aws.amazon.com/lambda/home?region=us-east-1#/functions/MyLambdaFunction?tab=aliases
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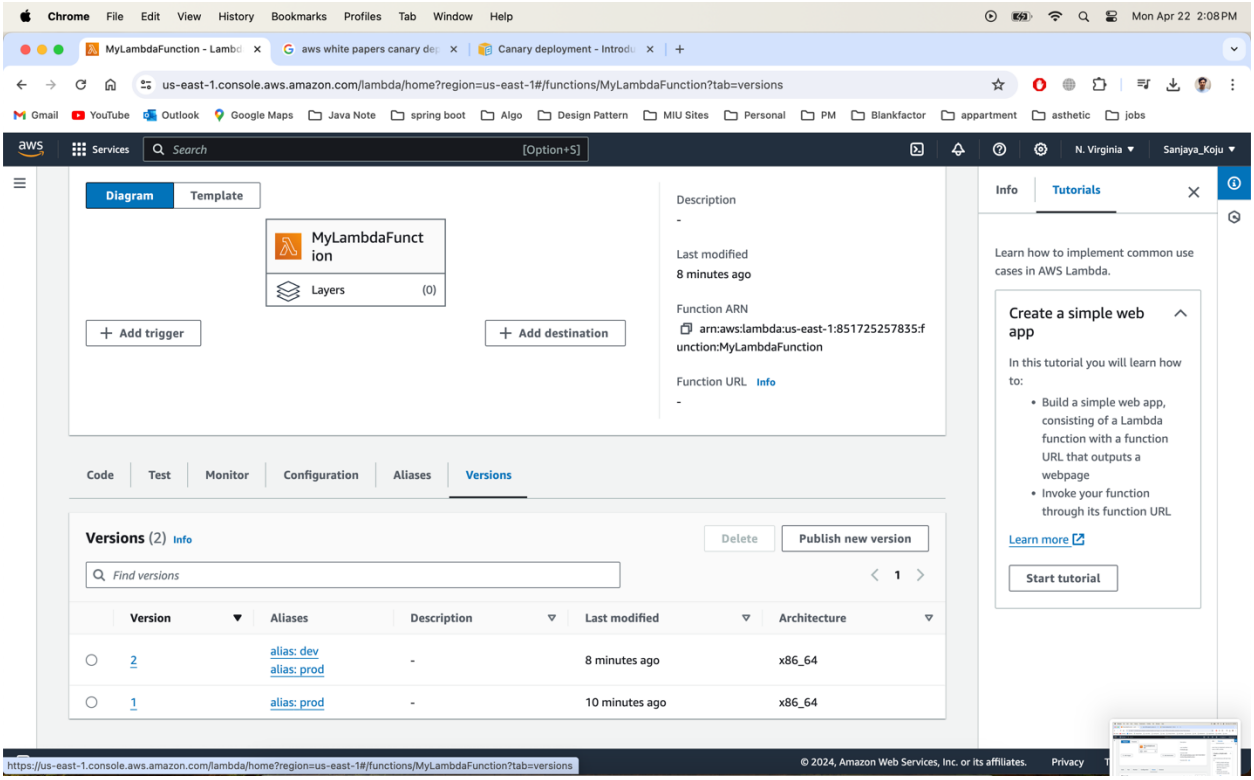
Chrome File Edit View History Bookmarks Profiles Tab Window Help
Mon Apr 22 2:08 PM
MyLambdaFunction - Lambd
aws white papers canary dep
Canary deployment - Introdu
us-east-1.console.aws.amazon.com/lambda/home?region=us-east-1#/functions/MyLambdaFunction?tab=versions
Gmail YouTube Outlook Google Maps Java Note spring boot Algo Design Pattern MIU Sites Personal PM Blankfactor appartment asthetic jobs
aws Services Search [Option+S] N. Virginia Sanjaya_Koju
Diagram Template
MyLambdaFunction
Layers (0)
+ Add trigger
+ Add destination
Description
-
Last modified
8 minutes ago
Function ARN
arn:aws:lambda:us-east-1:851725257835:function:MyLambdaFunction
Function URL Info
-
Code Test Monitor Configuration Aliases Versions
Versions (2) Info
Delete Publish new version
Find versions
1
Version Aliases Description Last modified Architecture
2 alias: dev alias: prod - 8 minutes ago x86_64
1 alias: prod - 10 minutes ago x86_64
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https://us-east-1.console.aws.amazon.com/lambda/home?region=us-east-1#/functions/MyLambdaFunction?tab=versions
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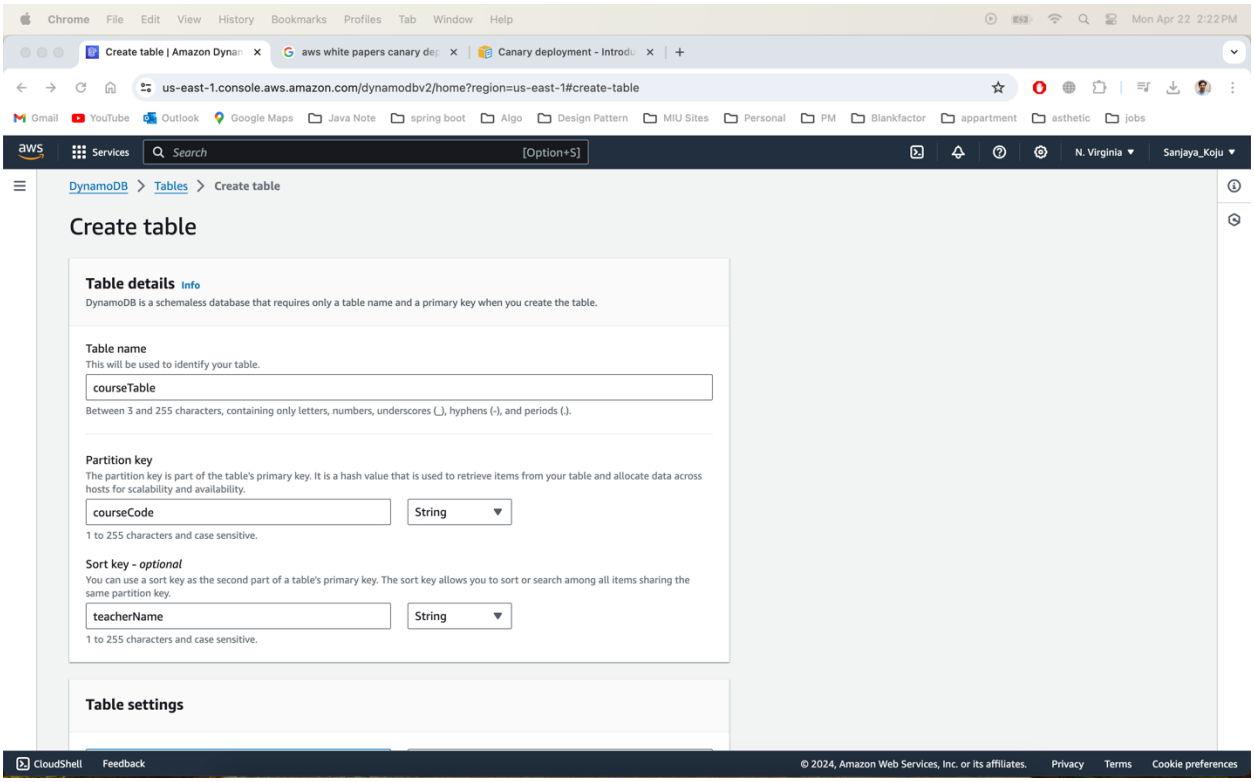
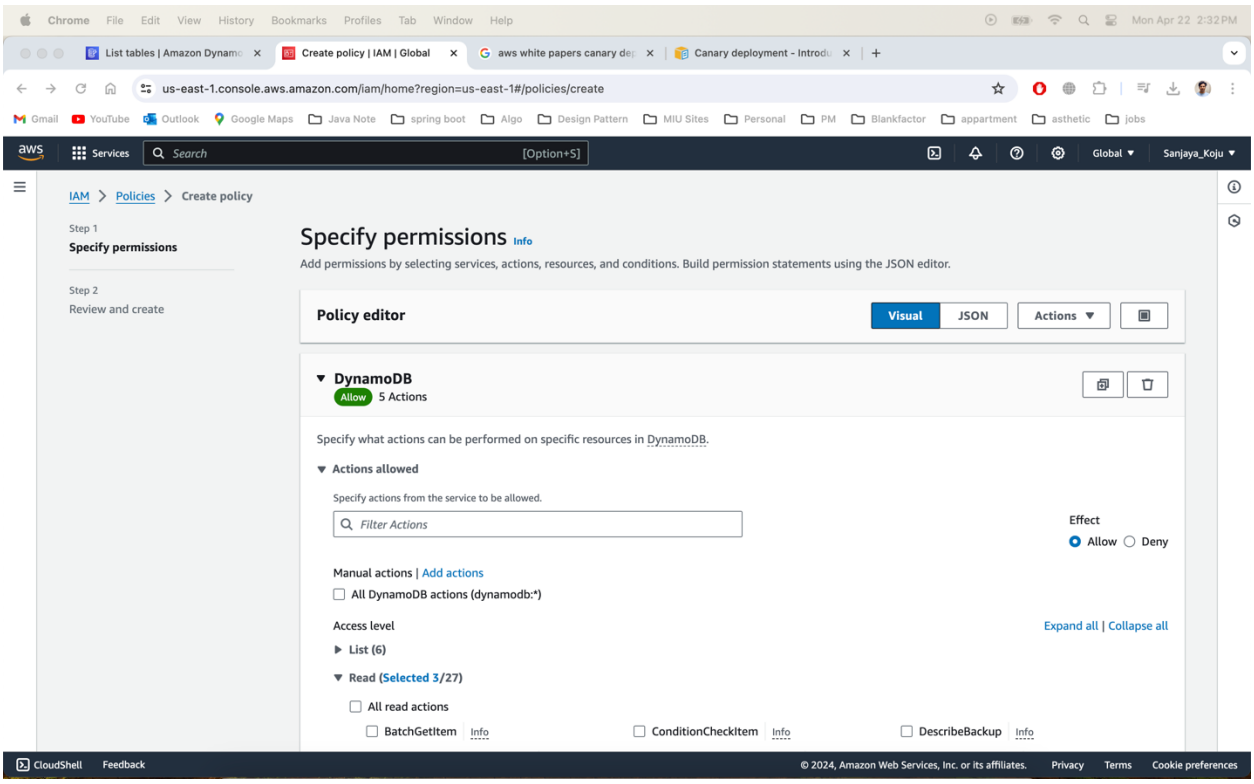
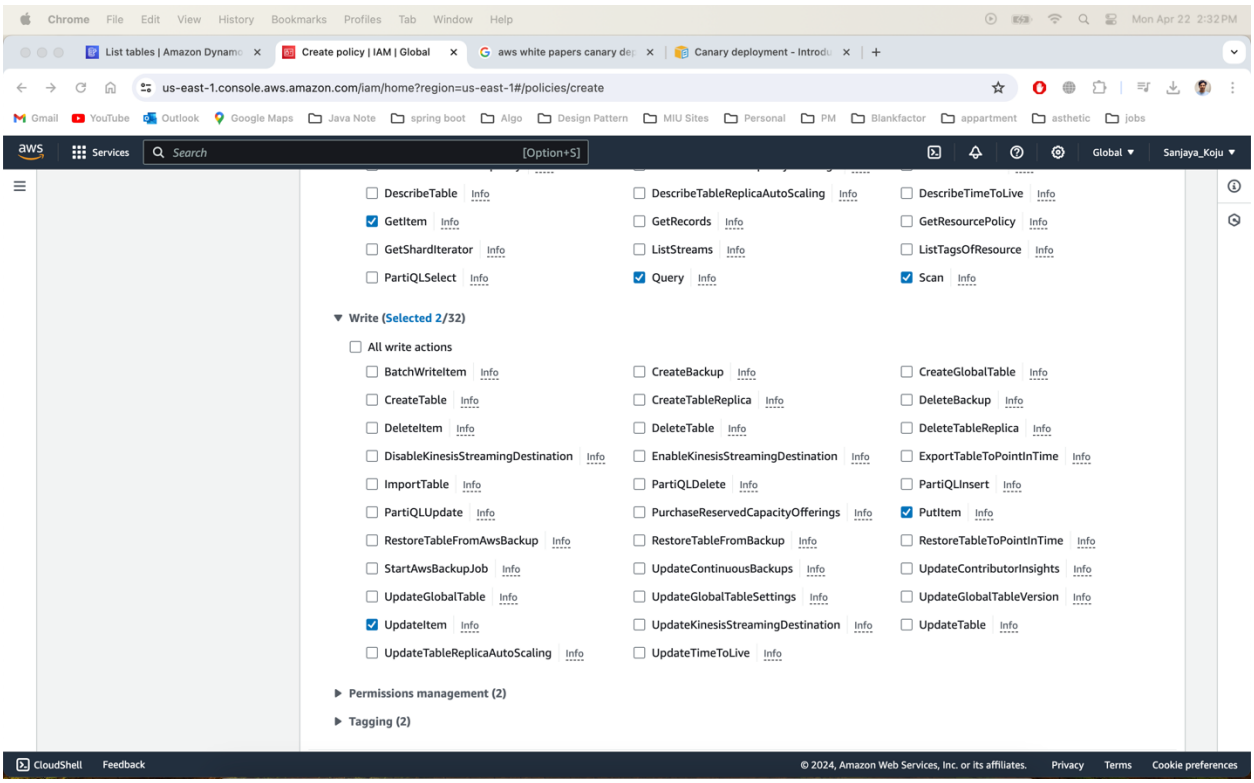
Task 1. Create a DynamoDB table, Lambda, and implement the Save functionality






Chrome File Edit View History Bookmarks Profiles Tab Window Help
Mon Apr 22 2:32 PM
List tables | Amazon Dynamo
Create policy | IAM | Global
aws white papers canary dep
Canary deployment - Introdu
us-east-1.console.aws.amazon.com/iam/home?region=us-east-1#/policies/create
Gmail YouTube Outlook Google Maps Java Note spring boot Algo Design Pattern MIU Sites Personal PM Blankfactor appartment asthetic jobs
aws Services Search [Option+S]
Global Sanjaya_Koju
DescribeTable Info
DescribeTableReplicaAutoScaling Info
DescribeTimeToLive Info
GetItem Info
GetRecords Info
GetResourcePolicy Info
GetShardIterator Info
ListStreams Info
ListTagsOfResource Info
PartiQLSelect Info
Query Info
Scan Info
Write (Selected 2/32)
All write actions
BatchWriteItem Info
CreateBackup Info
CreateGlobalTable Info
CreateTable Info
CreateTableReplica Info
DeleteBackup Info
DeleteItem Info
DeleteTable Info
DeleteTableReplica Info
DisableKinesisStreamingDestination Info
EnableKinesisStreamingDestination Info
ExportTableToPointInTime Info
ImportTable Info
PartiQLDelete Info
PartiQLInsert Info
PartiQLUpdate Info
PurchaseReservedCapacityOfferings Info
PutItem Info
RestoreTableFromAwsBackup Info
RestoreTableFromBackup Info
RestoreTableToPointInTime Info
StartAwsBackupJob Info
UpdateContinuousBackups Info
UpdateContributorInsights Info
UpdateGlobalTable Info
UpdateGlobalTableSettings Info
UpdateGlobalTableVersion Info
UpdateItem Info
UpdateKinesisStreamingDestination Info
UpdateTable Info
UpdateTableReplicaAutoScaling Info
UpdateTimeToLive Info
Permissions management (2)
Tagging (2)
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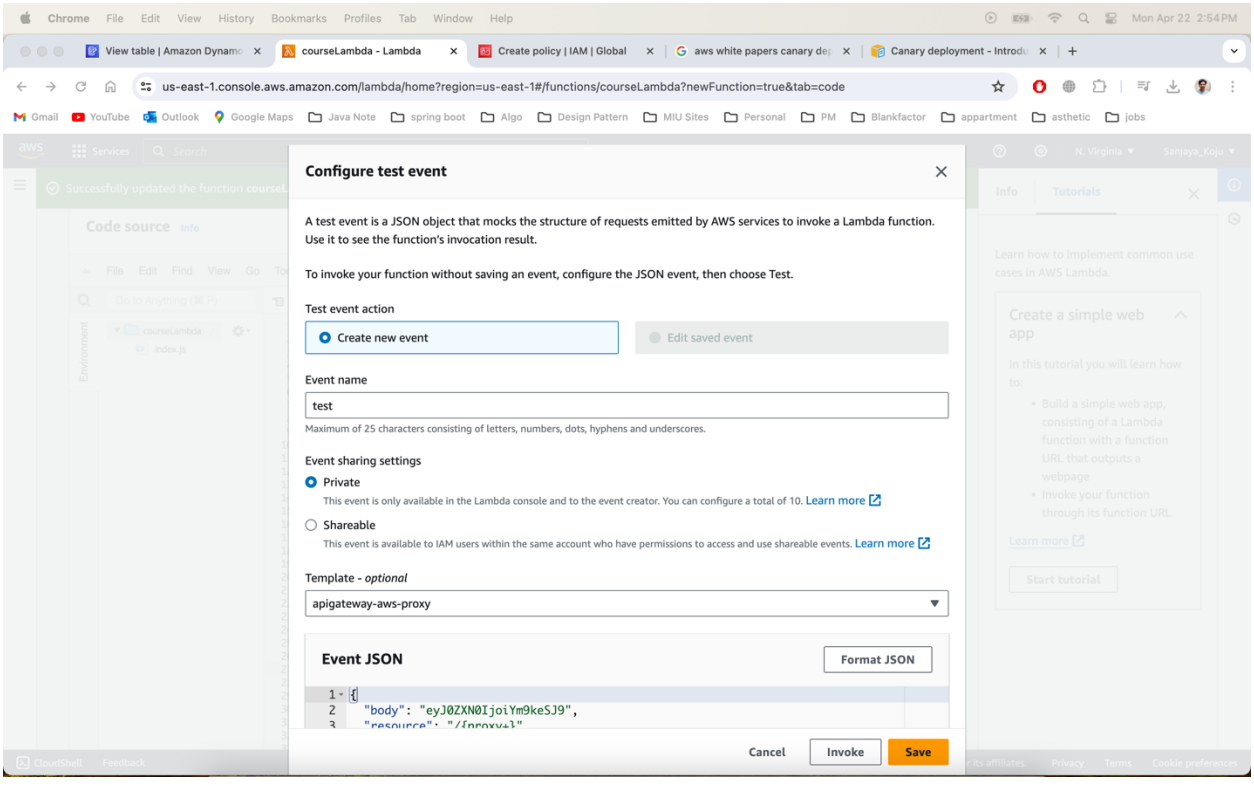
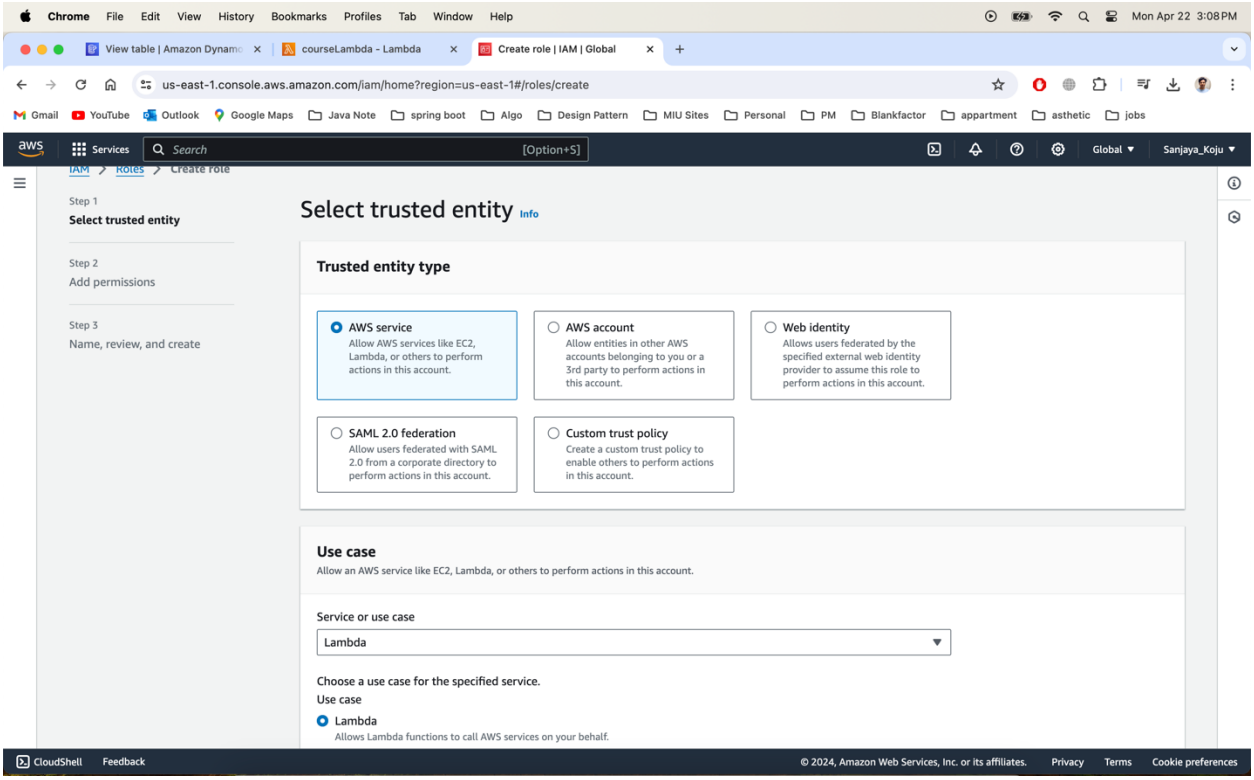

Chrome File Edit View History Bookmarks Profiles Tab Window Help
Mon Apr 22 2:54 PM
View table | Amazon Dynamo
courseLambda - Lambda
Create policy | IAM | Global
aws white papers canary dep
Canary deployment - Introdu
us-east-1.console.aws.amazon.com/lambda/home?region=us-east-1#/functions/courseLambda?newFunction=true&tab=code
Gmail YouTube Outlook Google Maps Java Note spring boot Algo Design Pattern MIU Sites Personal PM Blankfactor appartment asthetic jobs
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
test
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
apigateway-aws-proxy
Event JSON
Format JSON
1 {
2 "body": "eyJ0ZXN0IjoiYm9keSJ9",
Cancel
Invoke
Save


Chrome File Edit View History Bookmarks Profiles Tab Window Help
Mon Apr 22 3:08 PM
View table | Amazon Dynamo
courseLambda - Lambda
Create role | IAM | Global
us-east-1.console.aws.amazon.com/iam/home?region=us-east-1#/roles/create
Gmail YouTube Outlook Google Maps Java Note spring boot Algo Design Pattern MIU Sites Personal PM Blankfactor appartment asthetic jobs
Services Search [Option+S]
Global Sanjaya_Koju
IAM > Roles > Create role
Step 1
Select trusted entity
Step 2
Add permissions
Step 3
Name, review, and create
Select trusted entity Info
Trusted entity type
AWS service
Allow AWS services like EC2, Lambda, or others to perform actions in this account.
AWS account
Allow entities in other AWS accounts belonging to you or a 3rd party to perform actions in this account.
Web identity
Allows users federated by the specified external web identity provider to assume this role to perform actions in this account.
SAML 2.0 federation
Allow users federated with SAML 2.0 from a corporate directory to perform actions in this account.
Custom trust policy
Create a custom trust policy to enable others to perform actions in this account.
Use case
Allow an AWS service like EC2, Lambda, or others to perform actions in this account.
Service or use case
Lambda
Choose a use case for the specified service.
Use case
Lambda
Allows Lambda functions to call AWS services on your behalf.
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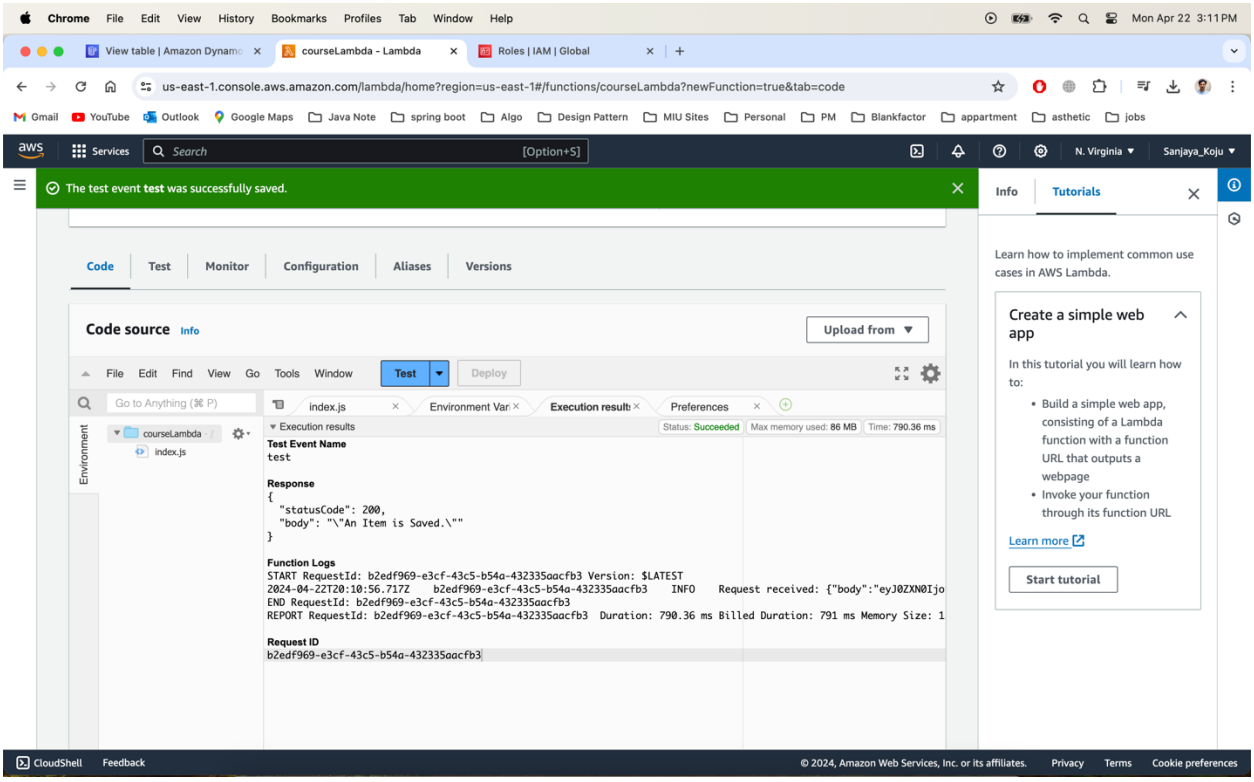
Chrome File Edit View History Bookmarks Profiles Tab Window Help
Mon Apr 22 3:11 PM
View table | Amazon Dynamo
courseLambda - Lambda
Roles | IAM | Global
us-east-1.console.aws.amazon.com/lambda/home?region=us-east-1#/functions/courseLambda?newFunction=true&tab=code
Gmail YouTube Outlook Google Maps Java Note spring boot Algo Design Pattern MIU Sites Personal PM Blankfactor appartment asthetic jobs
Services Search [Option+S]
N. Virginia Sanjaya_Koju
The test event test was successfully saved.
Code Test Monitor Configuration Aliases Versions
Code source Info
Upload from
File Edit Find View Go Tools Window Test Deploy
Go to Anything (⌘ P)
courseLambda
index.js
Environment
index.js Environment Var Execution result: Preferences
Execution results
Status: Succeeded Max memory used: 86 MB Time: 790.36 ms
Test Event Name
test
Response
{
"statusCode": 200,
"body": "\"An Item is Saved.\""
}
Function Logs
START RequestId: b2edf969-e3cf-43c5-b54a-432335aacfb3 Version: $LATEST
2024-04-22T20:10:56.717Z b2edf969-e3cf-43c5-b54a-432335aacfb3 INFO Request received: {"body":"eyJ0ZXN0Ijo
END RequestId: b2edf969-e3cf-43c5-b54a-432335aacfb3
REPORT RequestId: b2edf969-e3cf-43c5-b54a-432335aacfb3 Duration: 790.36 ms Billed Duration: 791 ms Memory Size: 1
Request ID
b2edf969-e3cf-43c5-b54a-432335aacfb3
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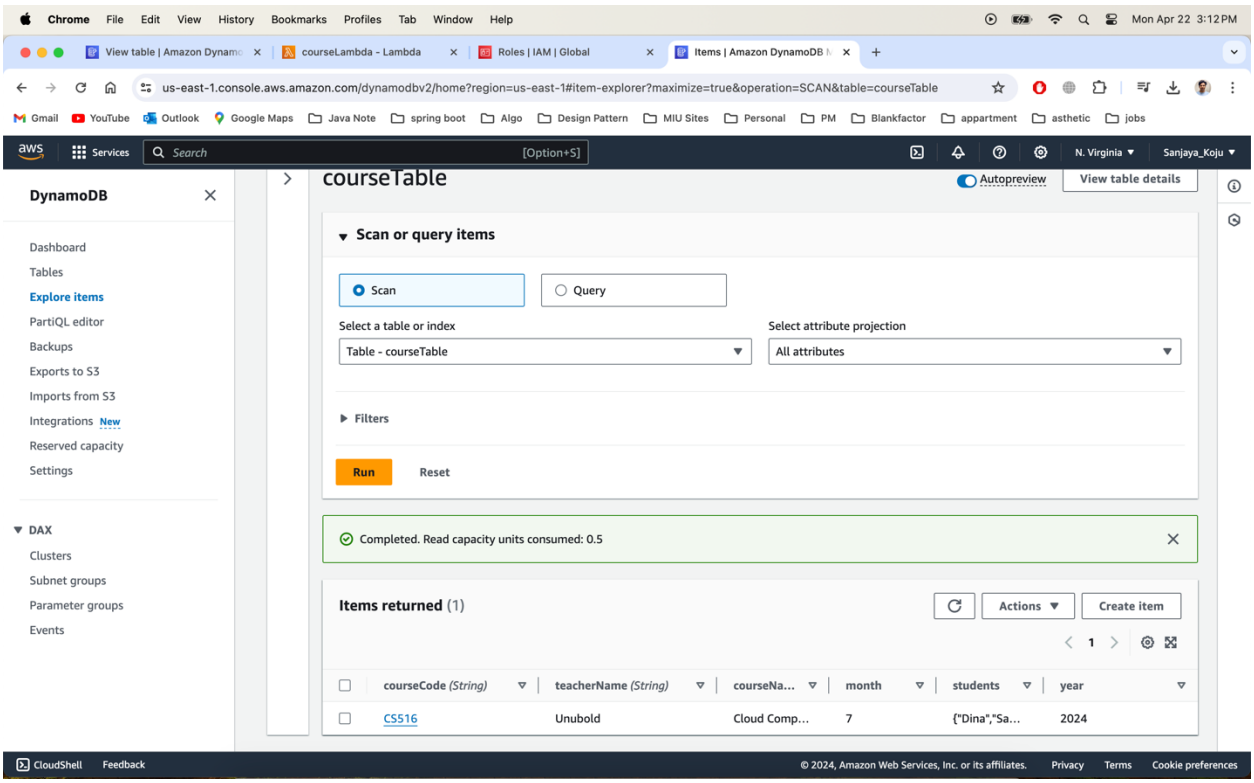
Chrome File Edit View History Bookmarks Profiles Tab Window Help
Mon Apr 22 3:12 PM
View table | Amazon Dynamo
courseLambda - Lambda
Roles | IAM | Global
Items | Amazon DynamoDB
us-east-1.console.aws.amazon.com/dynamodbv2/home?region=us-east-1#item-explorer?maximize=true&operation=SCAN&table=courseTable
Gmail YouTube Outlook Google Maps Java Note spring boot Algo Design Pattern MIU Sites Personal PM Blankfactor appartment asthetic jobs
aws Services Search [Option+S] N. Virginia Sanjaya_Koju
DynamoDB
Dashboard
Tables
Explore items
PartiQL editor
Backups
Exports to S3
Imports from S3
Integrations New
Reserved capacity
Settings
DAX
Clusters
Subnet groups
Parameter groups
Events
courseTable
Autopreview
View table details
Scan or query items
Scan
Query
Select a table or index
Table - courseTable
Select attribute projection
All attributes
Filters
Run
Reset
Completed. Read capacity units consumed: 0.5
Items returned (1)
Actions
Create item
courseCode (String)
teacherName (String)
courseNa...
month
students
year
CS516
Unubold
Cloud Comp...
7
{"Dina","Sa...
2024
CloudShell
Feedback
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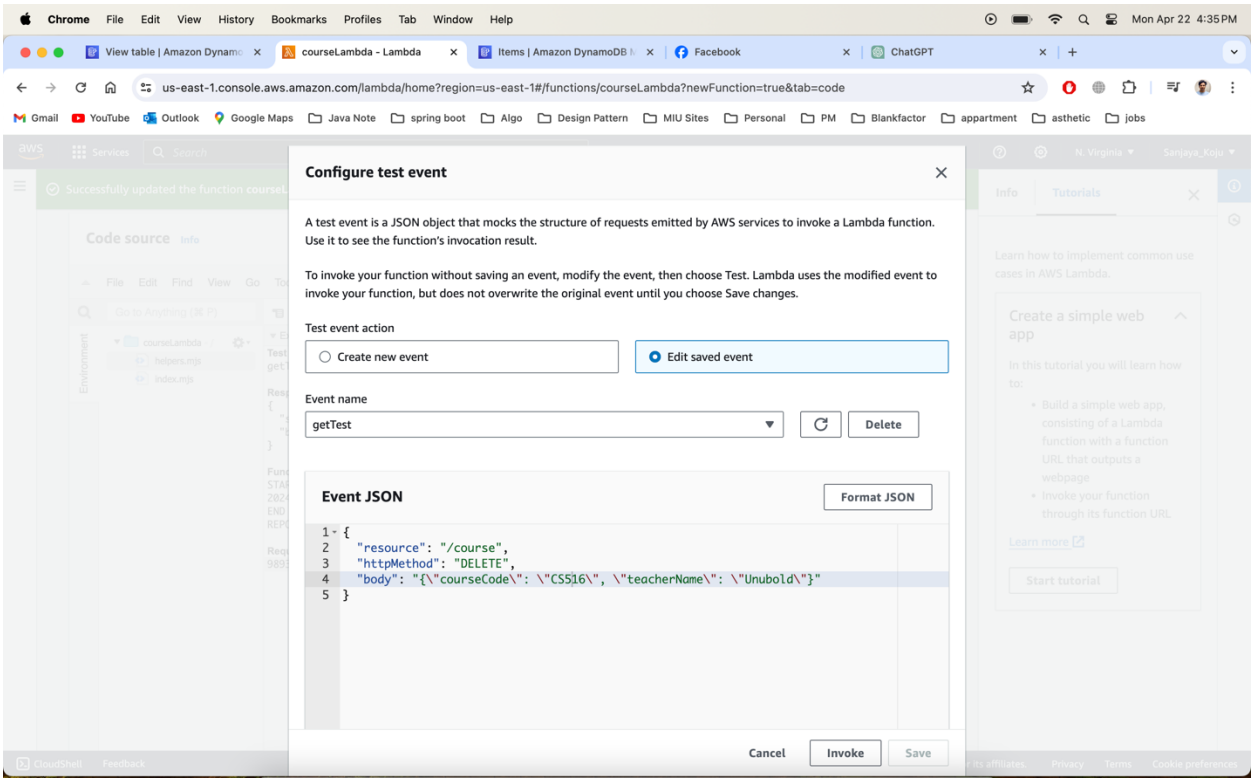
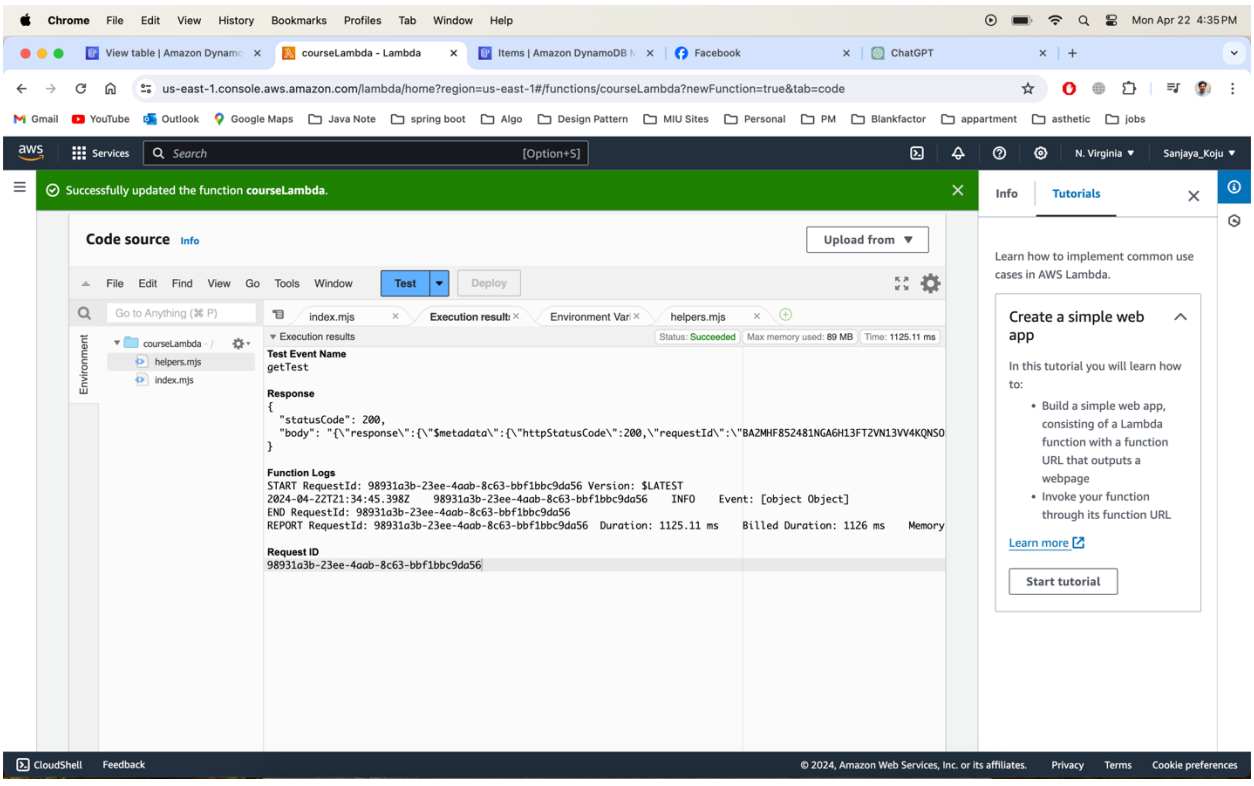
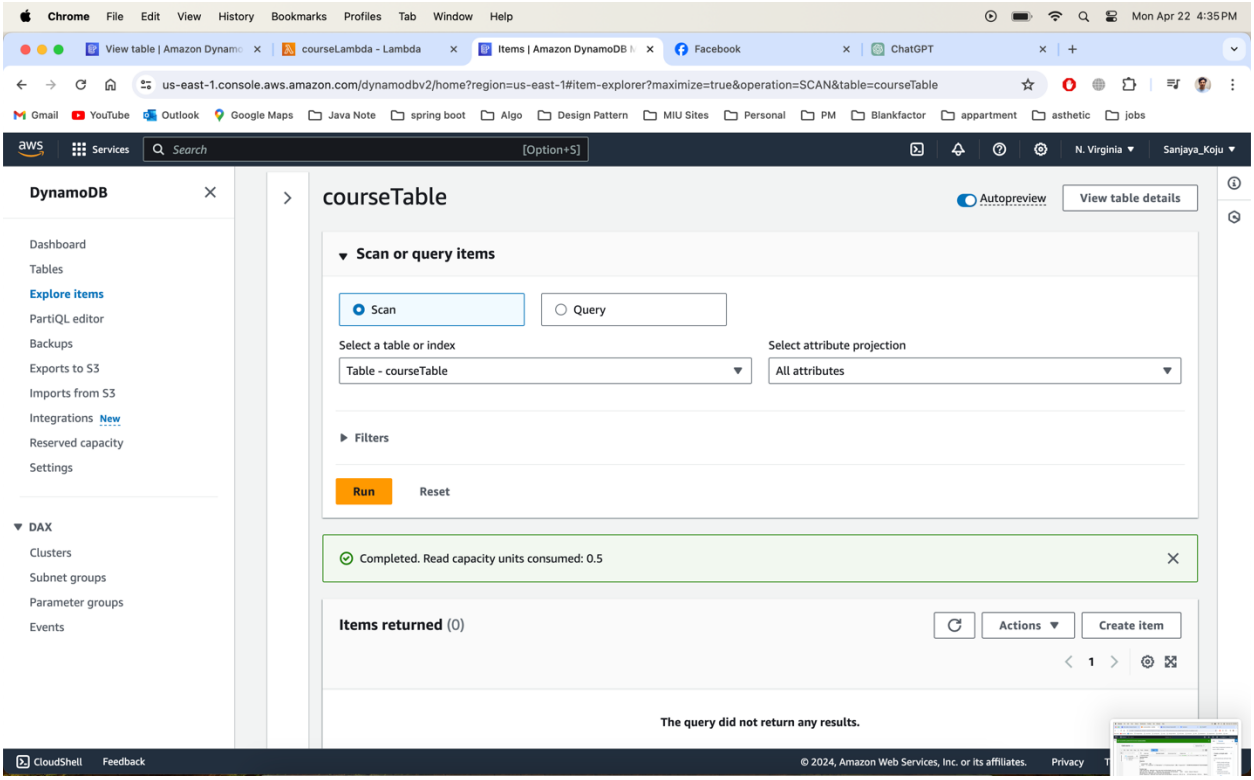
Task 2 – Implement the rest of the CRUD operations






Chrome File Edit View History Bookmarks Profiles Tab Window Help
Mon Apr 22 4:35 PM
us-east-1.console.aws.amazon.com/dynamodbv2/home?region=us-east-1#item-explorer?maximize=true&operation=SCAN&table=courseTable
DynamoDB
Dashboard
Tables
Explore items
PartiQL editor
Backups
Exports to S3
Imports from S3
Integrations New
Reserved capacity
Settings
DAX
Clusters
Subnet groups
Parameter groups
Events
courseTable
Autopreview
View table details
Scan or query items
Scan
Query
Select a table or index
Table - courseTable
Select attribute projection
All attributes
Filters
Run
Reset
Completed. Read capacity units consumed: 0.5
Items returned (0)
Actions
Create item
The query did not return any results.
CloudShell
Feedback
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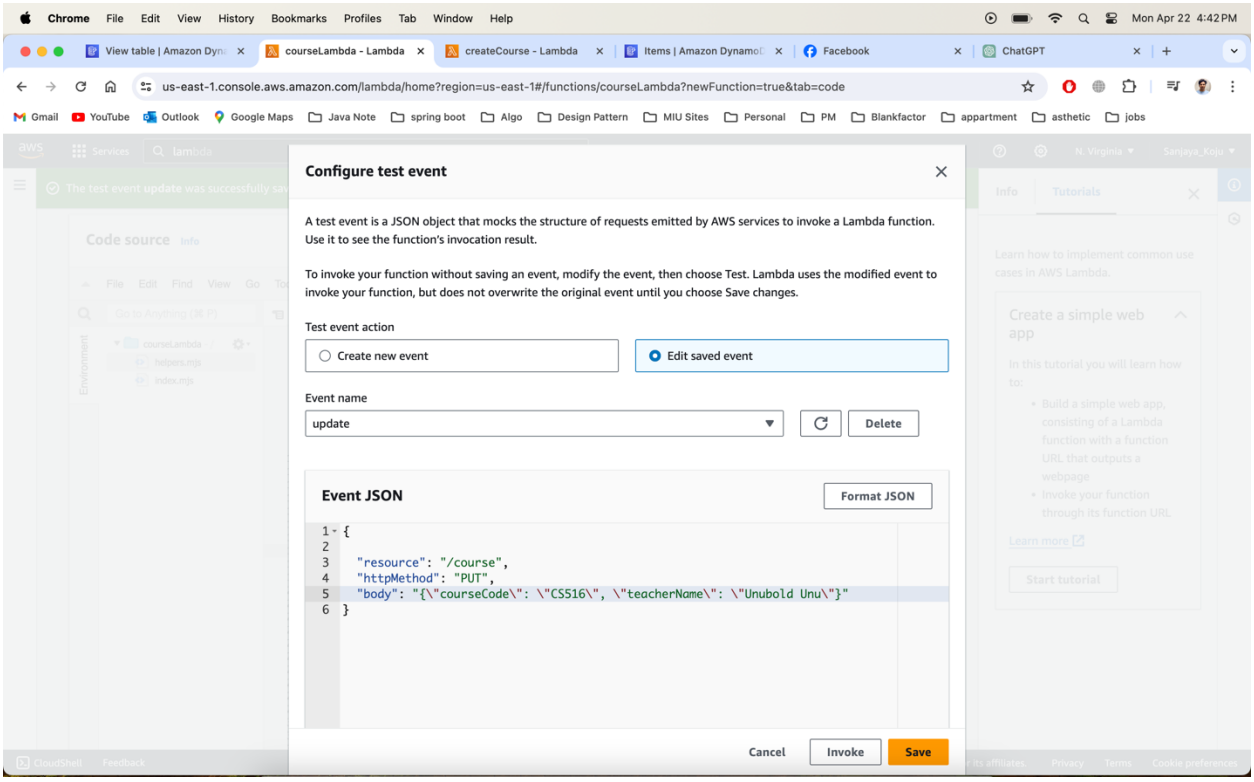
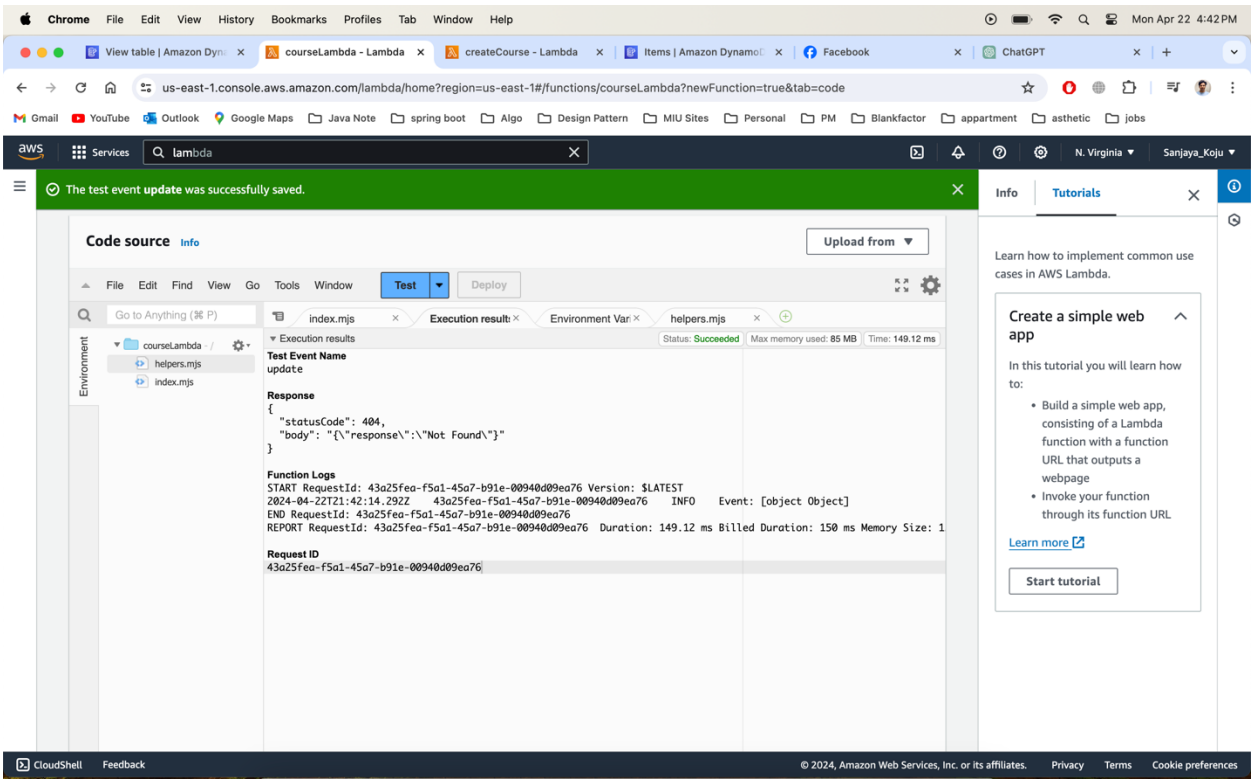

Chrome File Edit View History Bookmarks Profiles Tab Window Help
Mon Apr 22 4:42 PM
us-east-1.console.aws.amazon.com/lambda/home?region=us-east-1#/functions/courseLambda?newFunction=true&tab=code
Configure test event
A test event is a JSON object that mocks the structure of requests emitted by AWS services 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
update
Delete
Event JSON
Format JSON
{
"resource": "/course",
"httpMethod": "PUT",
"body": "{\"courseCode\": \"CSS16\", \"teacherName\": \"Unubold Unu\"}"
}
Cancel
Invoke
Save



Ignored this part

Codes for future references:

Task 1:

```
const AWS = require("aws-sdk");
const dynamodb = new AWS.DynamoDB({
  apiVersion: "2012-08-10"
});
const tableName = "courseTable";

exports.handler = async(event) => {
  console.log("Request received: "+ JSON.stringify(event));

  const saveParameters = {
    TableName: tableName,
    Item: {
      "courseCode": {
        S: 'CS516'
      },
      "courseName": {
        S: 'Cloud Computing'
      },
      "teacherName": {
        S: 'Unubold'
```

```
    },
    "students": {
      SS: [
        "Sanjaya",
        "Susan",
        "Dina"
        ]
    },
    "month": {
      N: "7"
    },
    "year": {
      N: "2024"
    }
   }
 };

 await dynamodb.putItem(saveParameters).promise();

 const response = {
  statusCode: 200,
  body: JSON.stringify('An Item is Saved.')
 };
 return response;
};
```