AWS CDK Tutorial with JAVA | CRUD API | Gateway, Lambda, DynamoDb

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How to create CRUD api tutorial link : • How to Create an API in AWS | API Gat...

In this tutorial, we will create AWS Cloud Infrastructure (Api Gateway, Lambda and DynamoDb Table) using JAVA language.

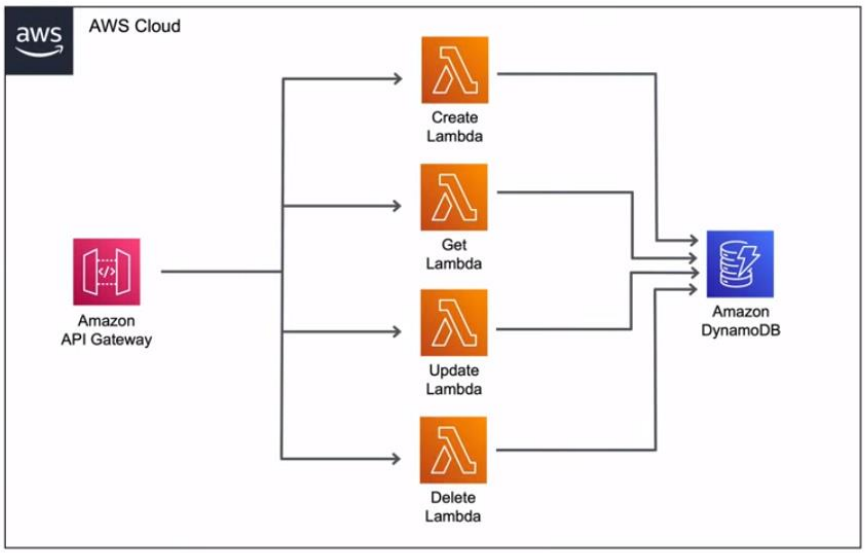
AWS CDK takes the code and compiles it down to CloudFormation template. CDK code is easy to understand and build reusable Cloud Components (Constructs).

aws cdk

In this tutorial, we will create AWS Cloud Infrastructure using JAVA language. We will create an Api gateway, 4 Lambda functions, a DynamoDB Table and connect them all together.

aws cdk

Diagram



aws cdk

PREREQUISITES

AWS ACCOUNT
AWS CDK INSTALLED
MAVEN INSTALLED
UNDERSTANDING OF BASIC JAVA
HAVE EXPERIENCE WITH POPULAR AWS SERVICES

aws cdk

LETS START ...

aws-cdk-java — Edited

We have already written our Lambda code to create, read, update, delete items from a DynamoDB table.

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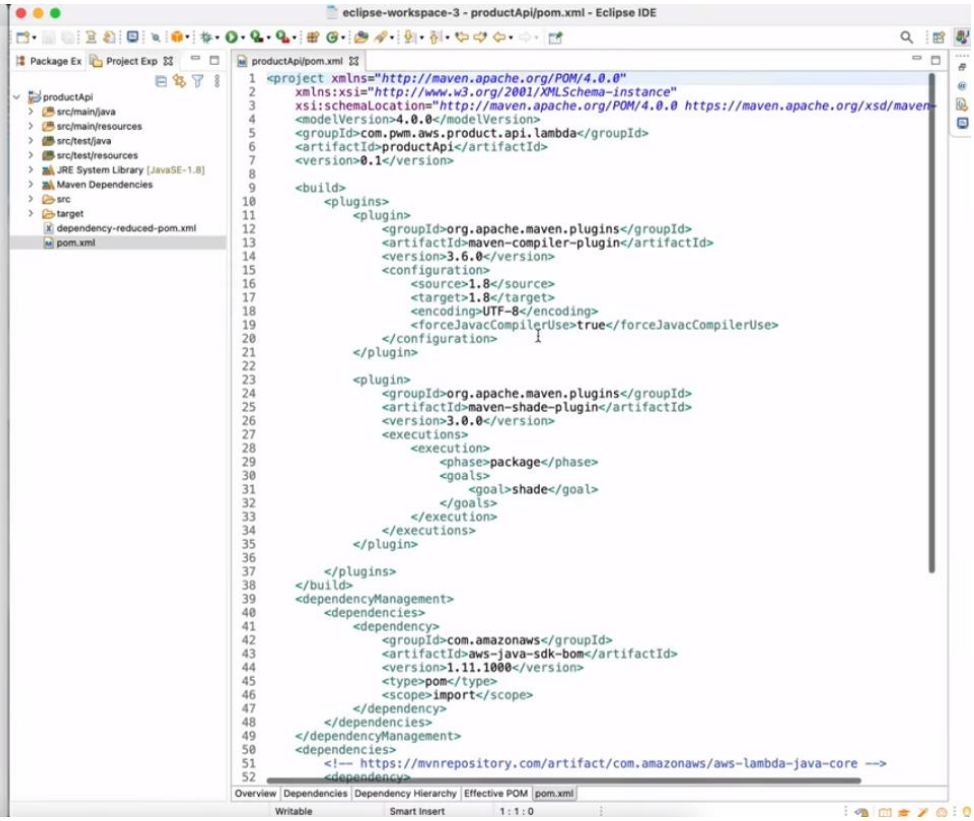

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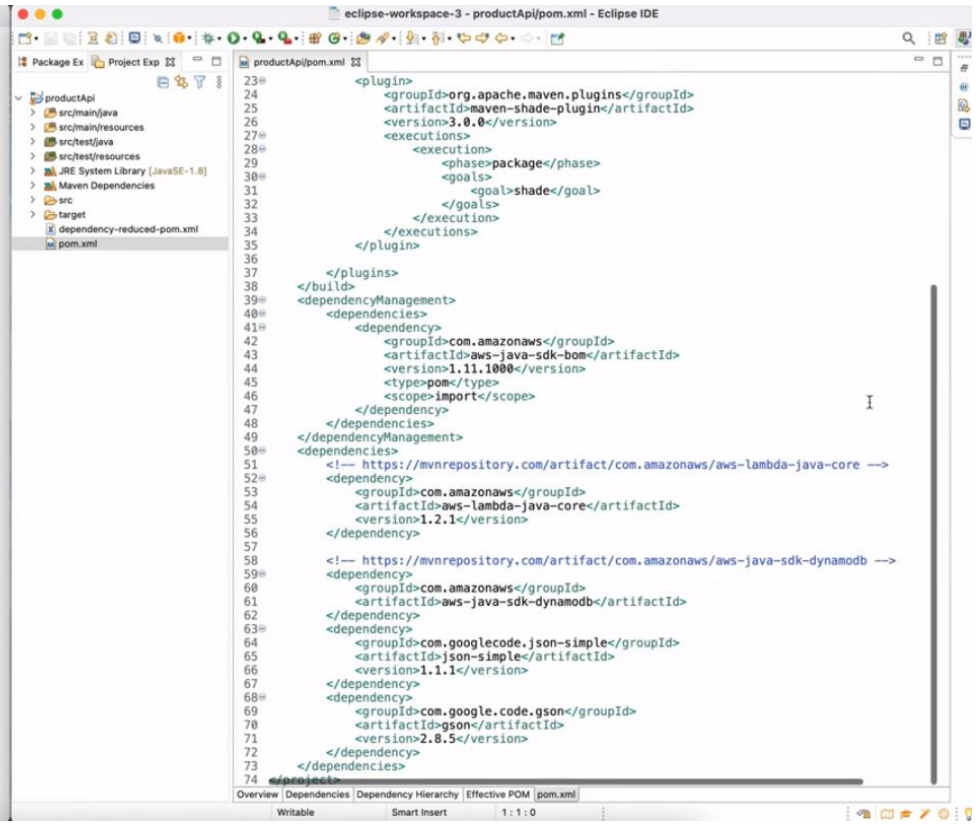

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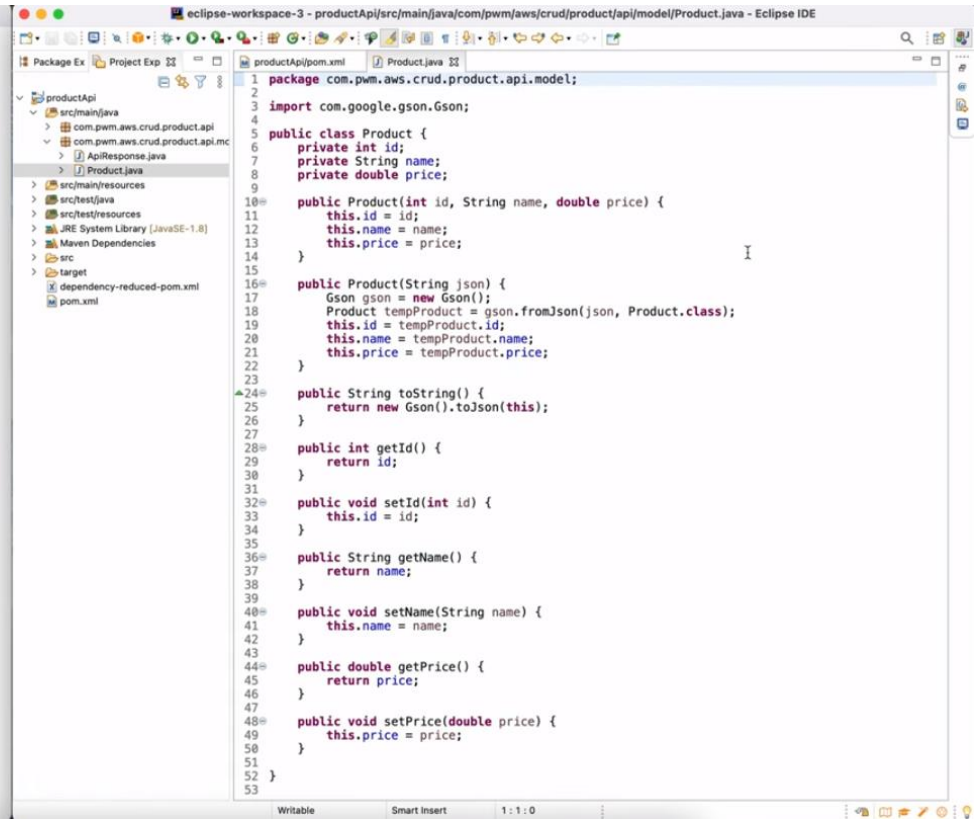

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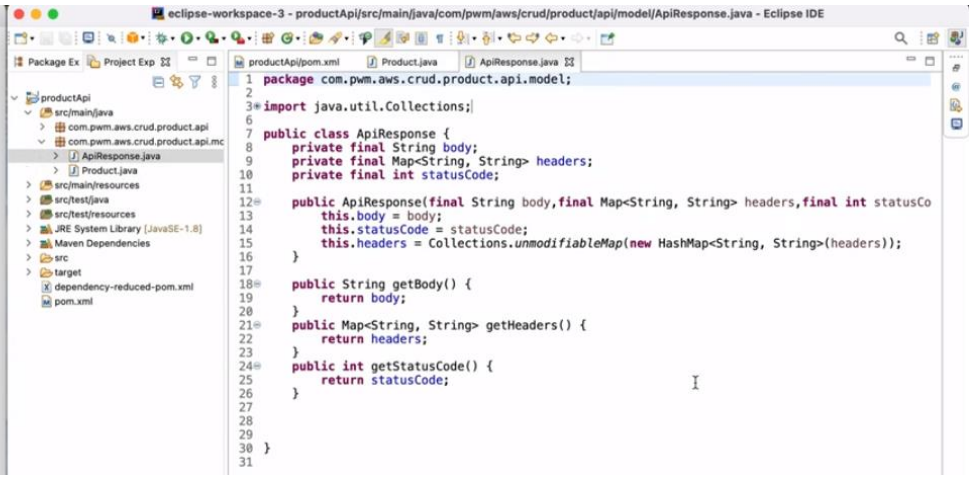

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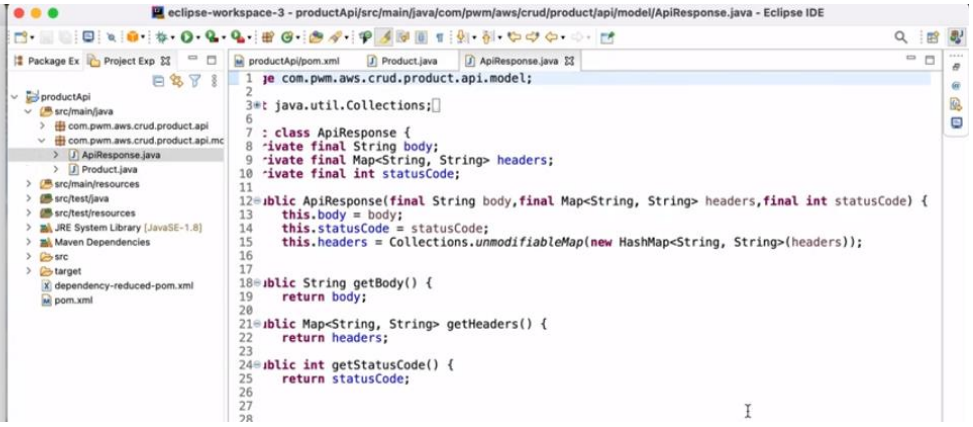

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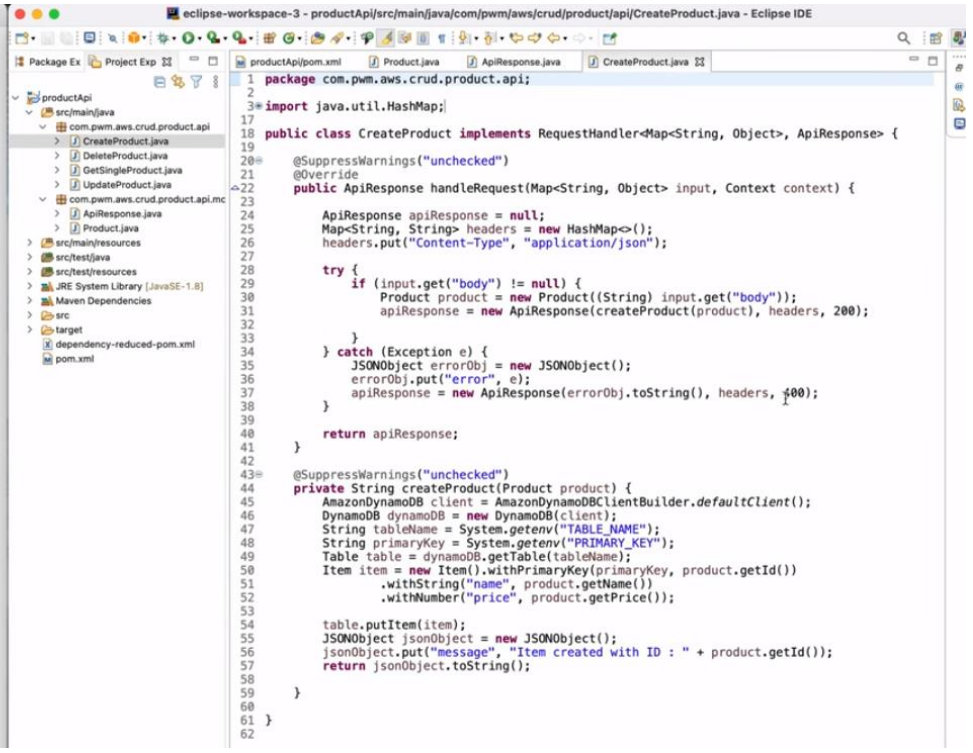

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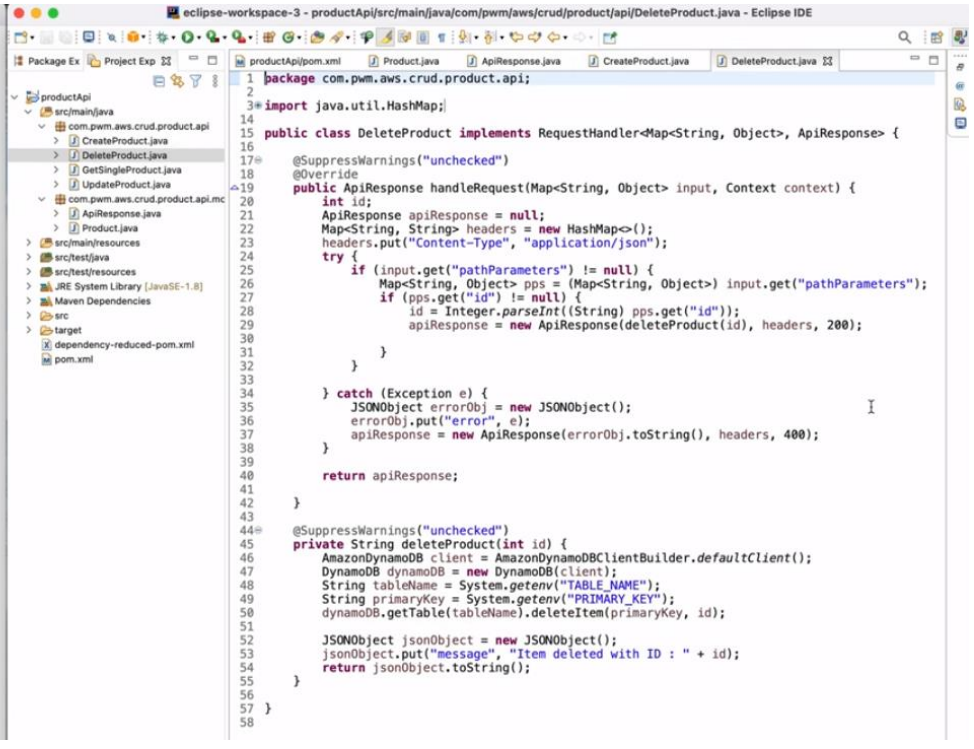

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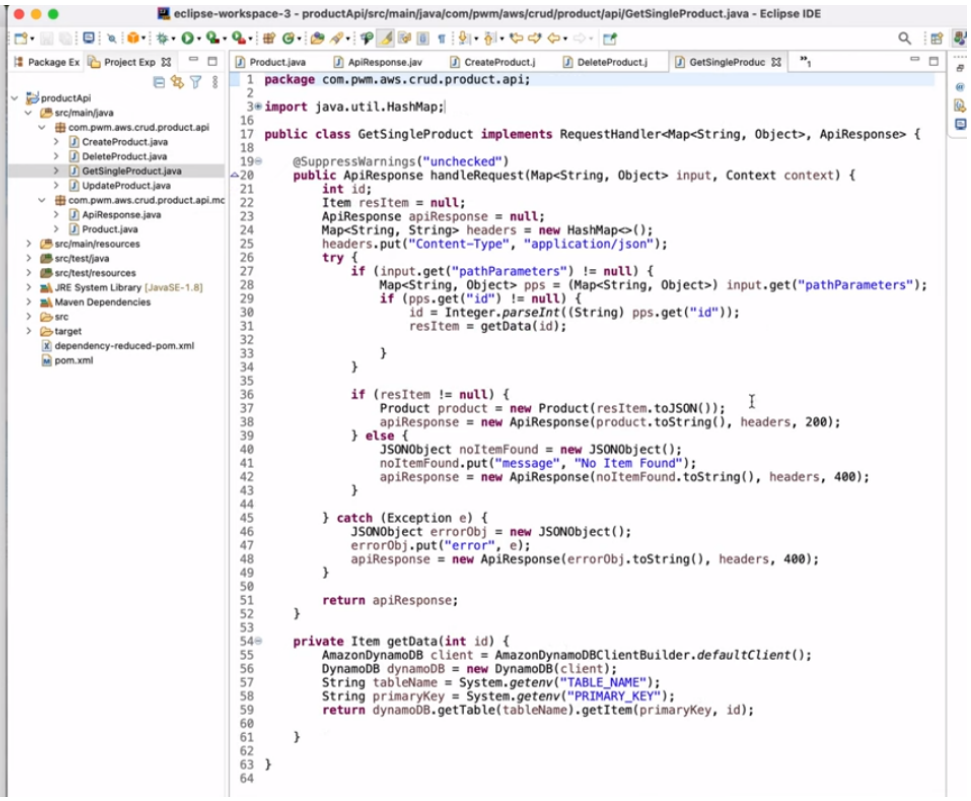

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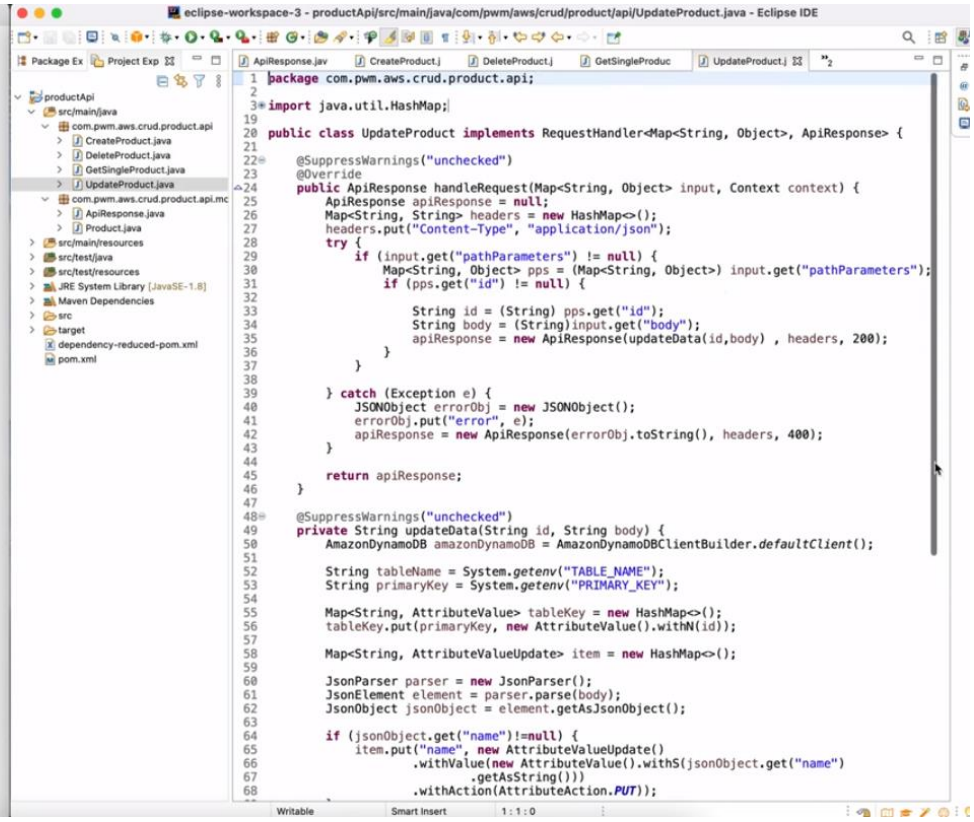

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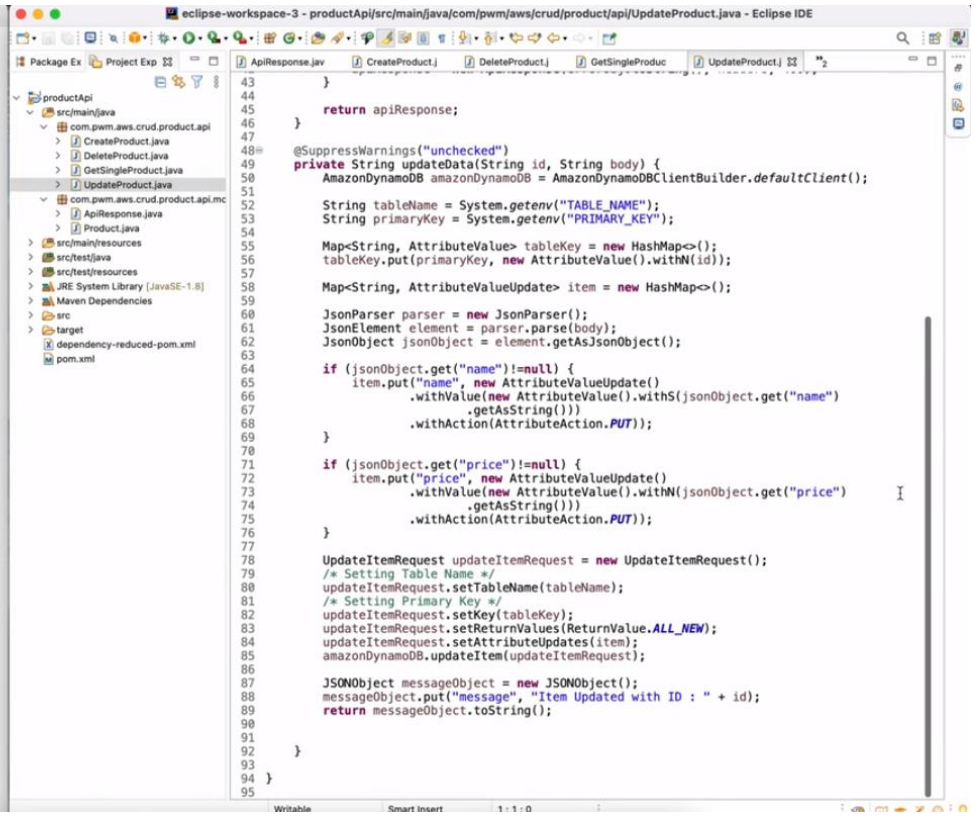

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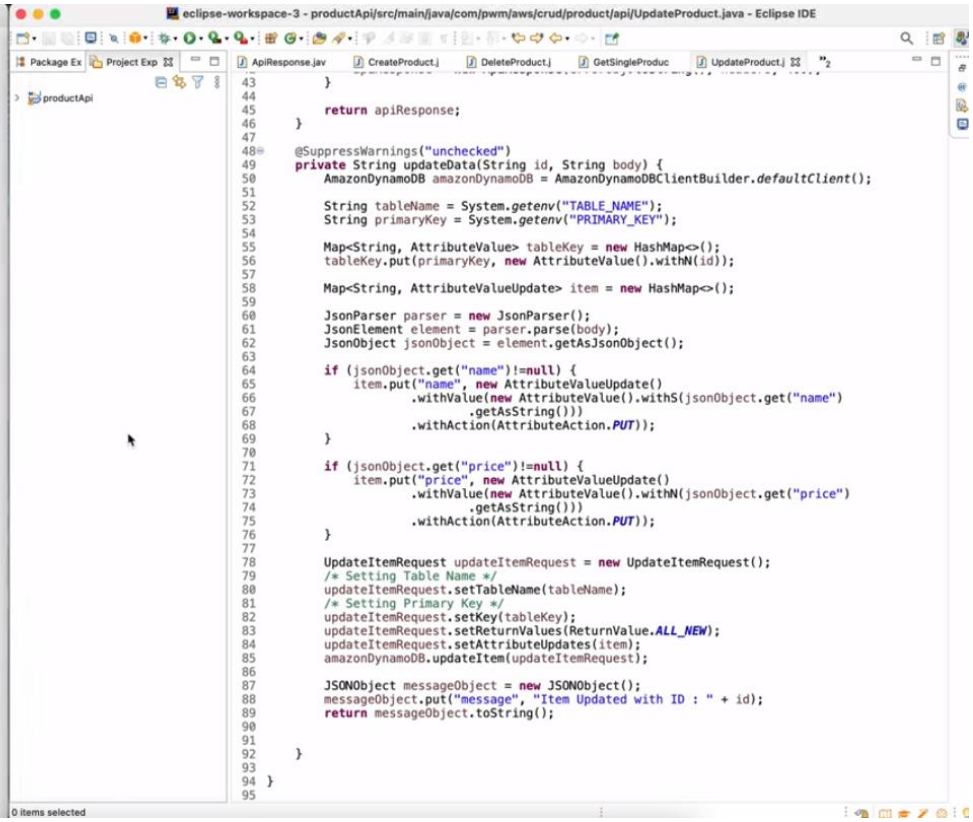

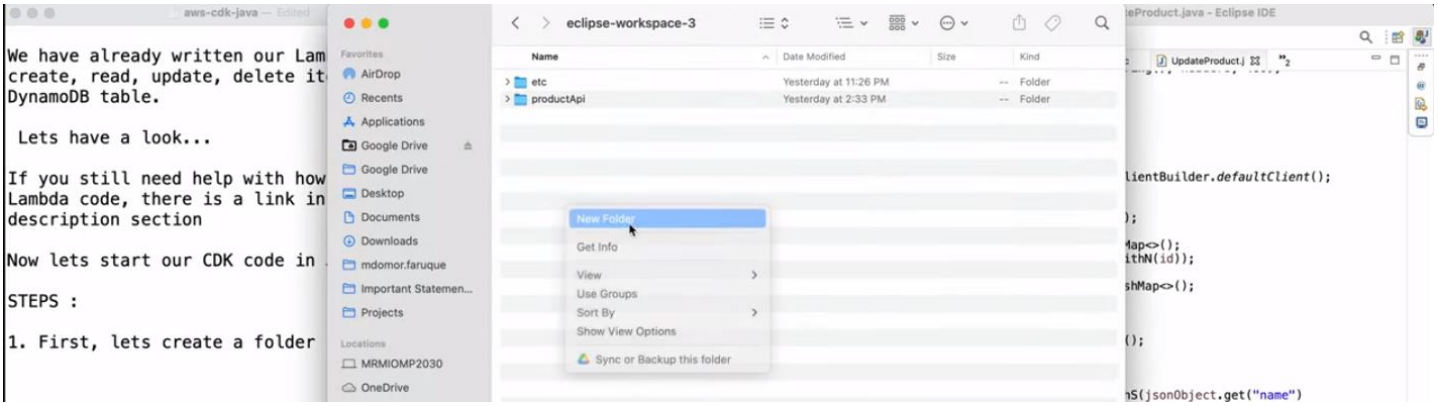
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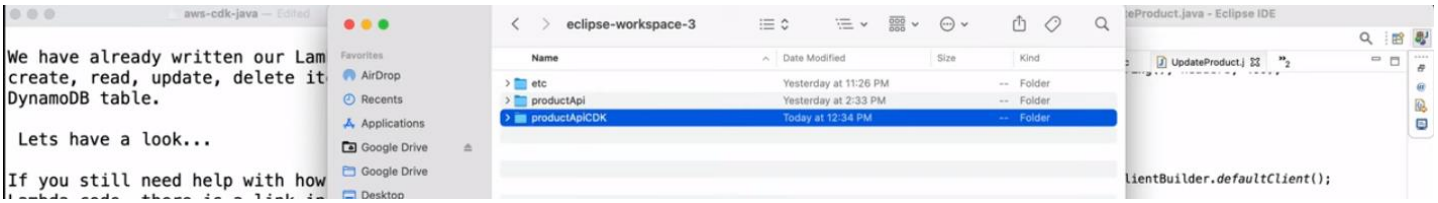
1. First, lets create a folder
eclipse-workspace-3
Name
Date Modified
Size
Kind
etc
Yesterday at 11:26 PM
Folder
productApi
Yesterday at 2:33 PM
Folder
New Folder
Get Info
View
Use Groups
Sort By
Show View Options
Sync or Backup this folder
AirDrop
Recents
Applications
Google Drive
Desktop
Documents
Downloads
mdomor.faruque
Projects
MRMIOMP2030
OneDrive
UpdateProduct.j
lientBuilder.defaultClient();
);
Map<>();
ithN(id));
shMap<>();
();
hS(jsonObject.get("name")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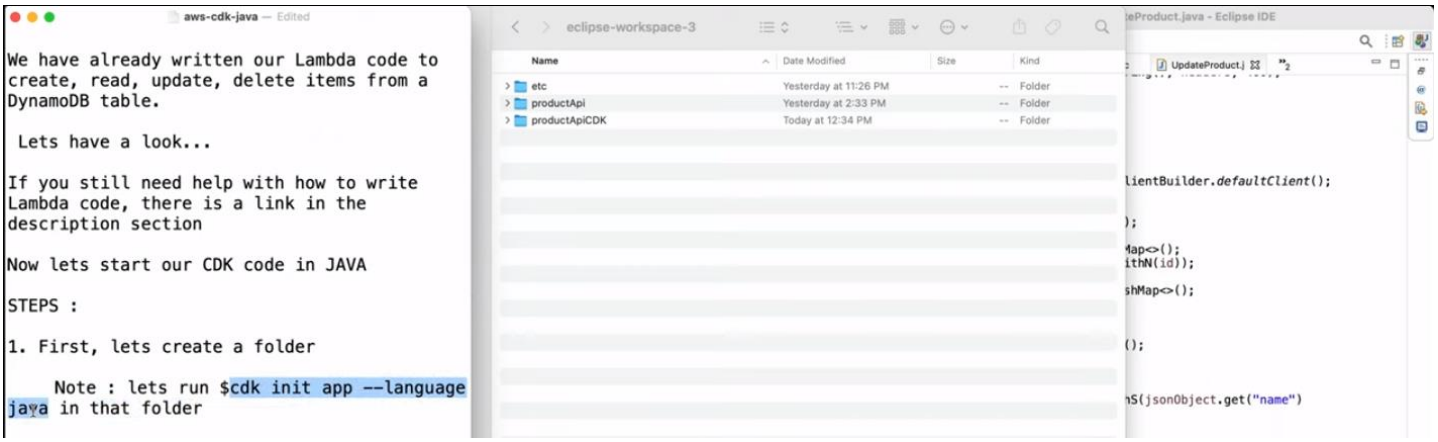
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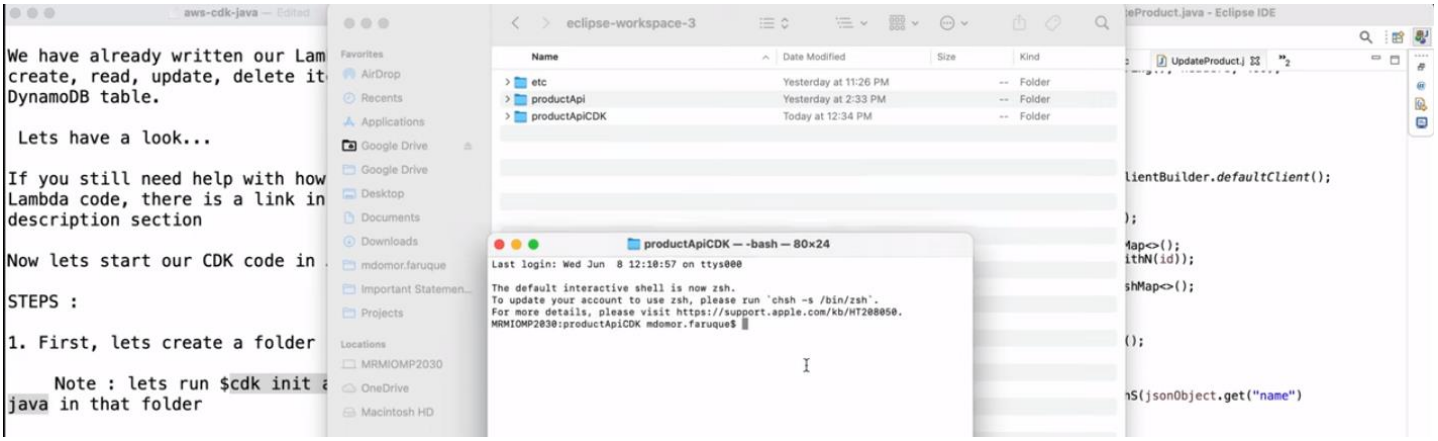
);
Map<>();
ithN(id));
shMap<>();
();
hS(jsonObject.get("name")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Folder
productApiCDK
Today at 12:34 PM
Folder
productApiCDK — -bash — 80×24
Last login: Wed Jun 8 12:10:57 on ttys000
The default interactive shell is now zsh.
To update your account to use zsh, please run `chsh -s /bin/zsh`.
For more details, please visit https://support.apple.com/kb/HT208050.
MRMIOMP2030:productApiCDK mdomor.faruque$
Macintosh HD
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lientBuilder.defaultClient();
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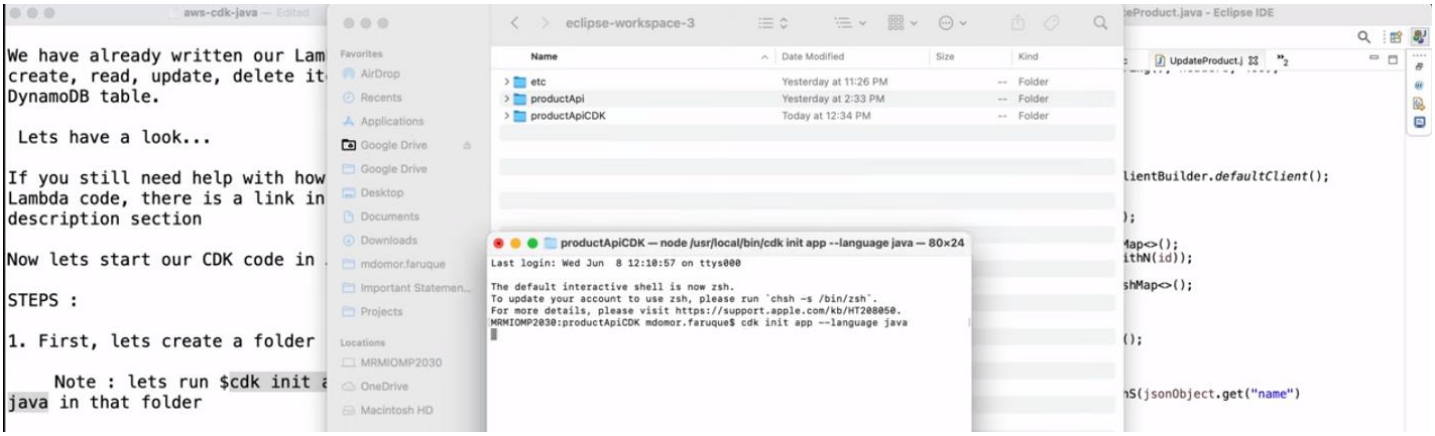
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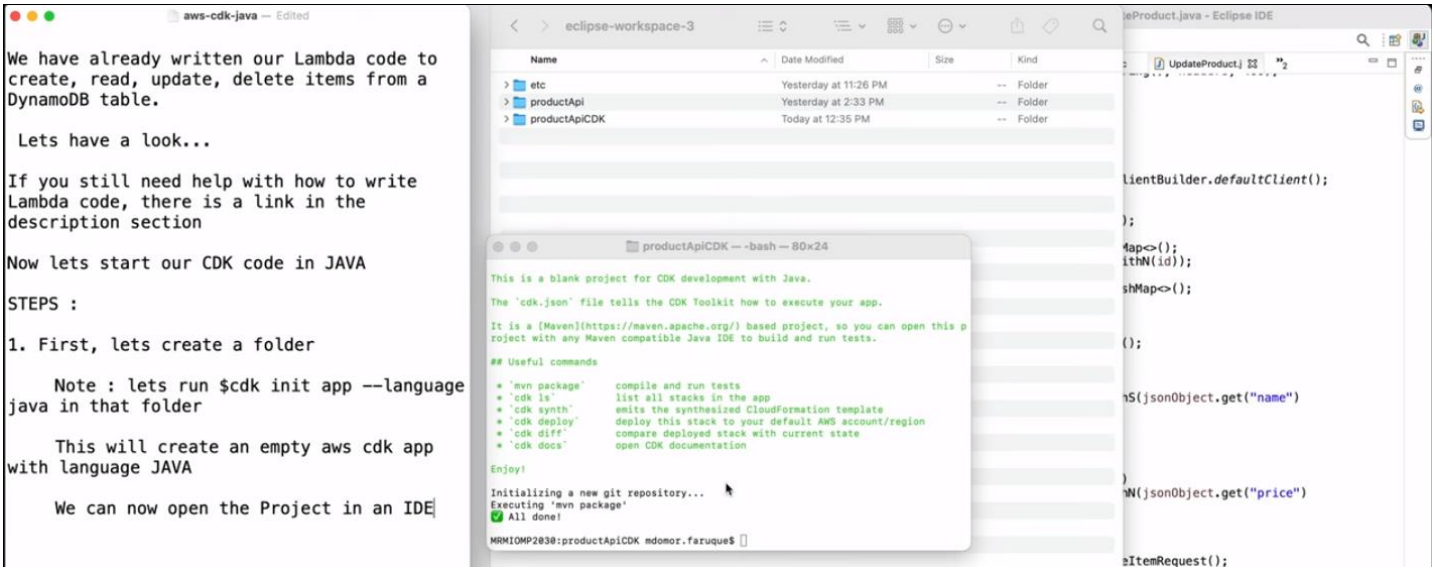
Folder
productApiCDK — node /usr/local/bin/cdk init app --language java — 80×24
Last login: Wed Jun 8 12:10:57 on ttys000
The default interactive shell is now zsh.
To update your account to use zsh, please run `chsh -s /bin/zsh`.
For more details, please visit https://support.apple.com/kb/HT208050.
MRMIOMP2030:productApiCDK mdomor.faruque$ cdk init app --language java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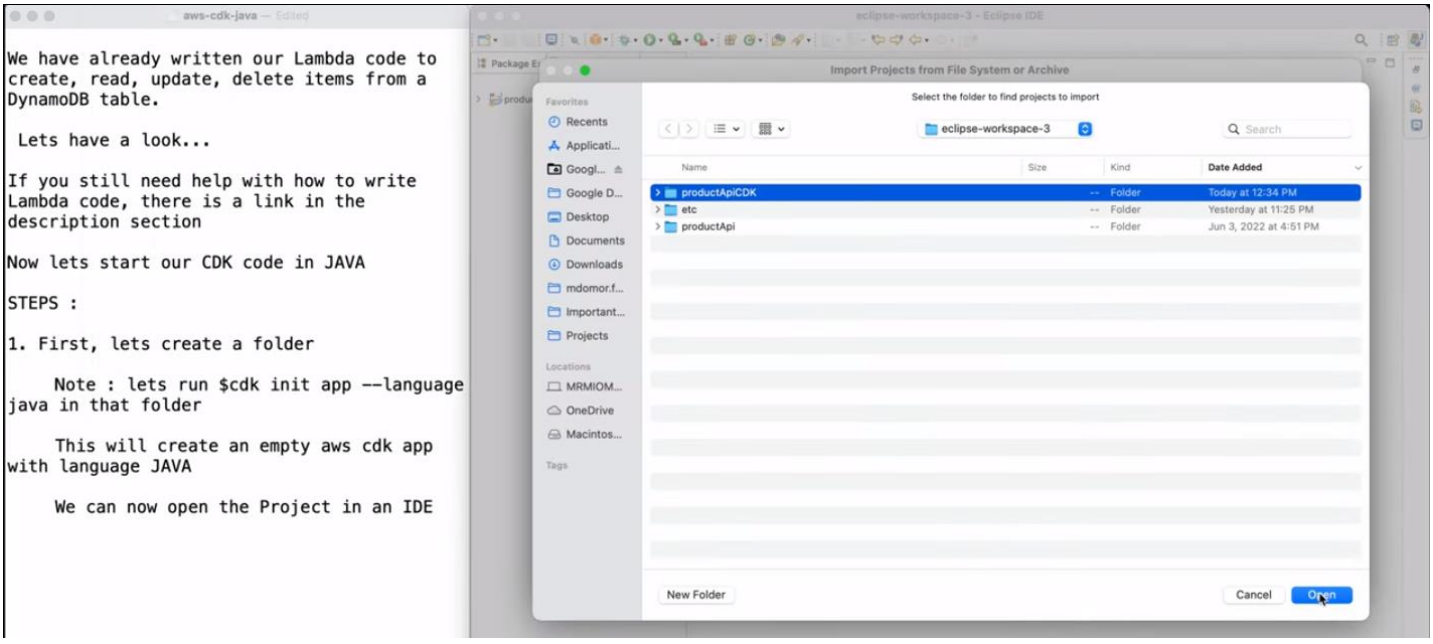
This will create an empty aws cdk app with language JAVA
We can now open the Project in an IDE
eclipse-workspace-3
productApiCDK — -bash — 80×24
This is a blank project for CDK development with Java.
The 'cdk.json' file tells the CDK Toolkit how to execute your app.
It is a [Maven](https://maven.apache.org/) based project, so you can open this p
roject with any Maven compatible Java IDE to build and run tests.
Useful commands
* `mvn package` compile and run tests
* `cdk ls` list all stacks in the app
* `cdk synth` emits the synthesized CloudFormation template
* `cdk deploy` deploy this stack to your default AWS account/region
* `cdk diff` compare deployed stack with current state
* `cdk docs` open CDK documentation
Enjoy!
Initializing a new git repository...
Executing 'mvn package'
All done!
MRMIOMP2030:productApiCDK mdomor.faruque$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Import Projects from File System or Archive
Select the folder to find projects to import
eclipse-workspace-3
Search
Name
Size
Kind
Date Added
productApiCDK
Folder
Today at 12:34 PM
etc
Folder
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productApi
Folder
Jun 3, 2022 at 4:51 PM
New Folder
Cancel
Open

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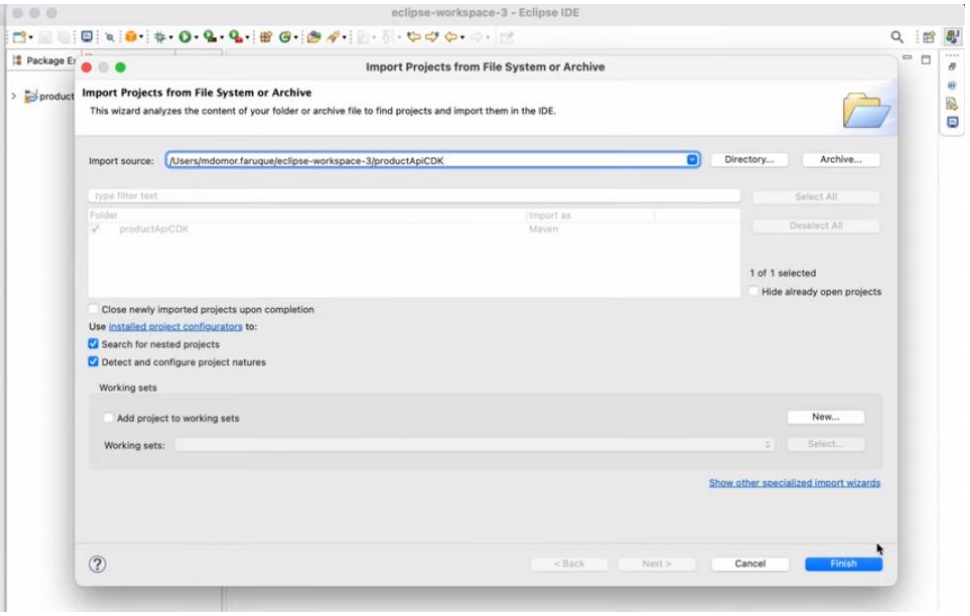

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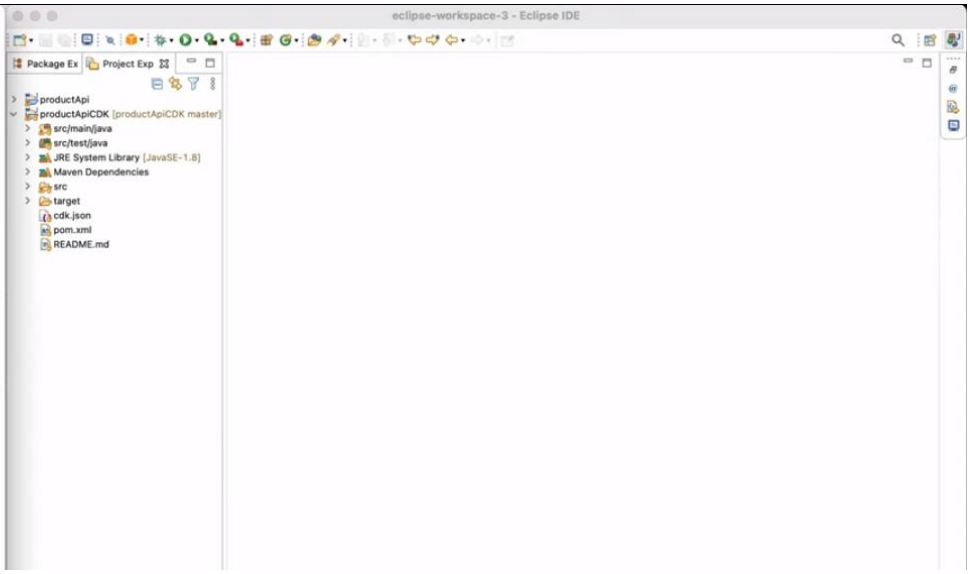

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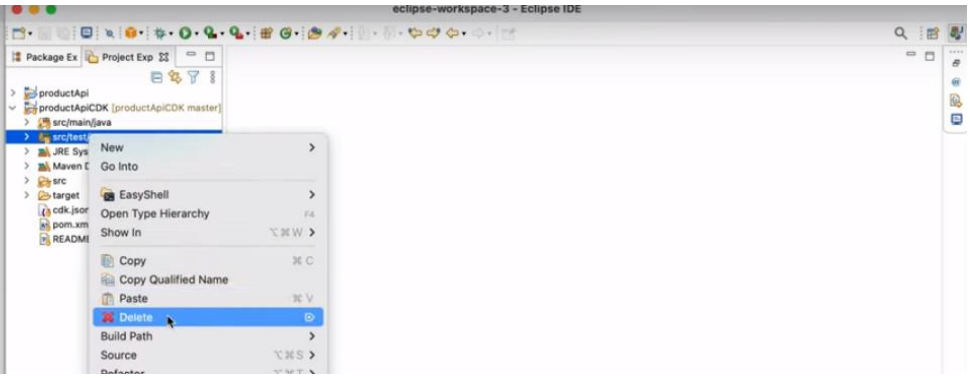

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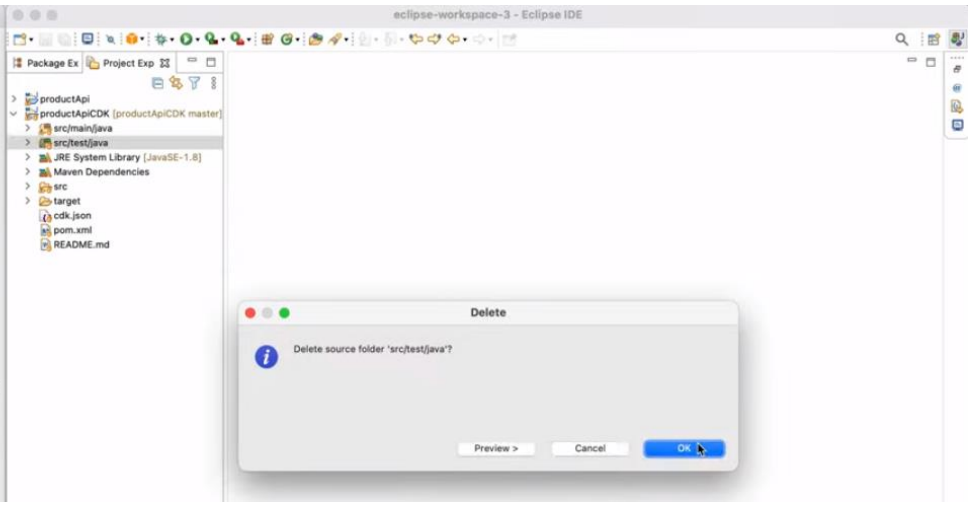

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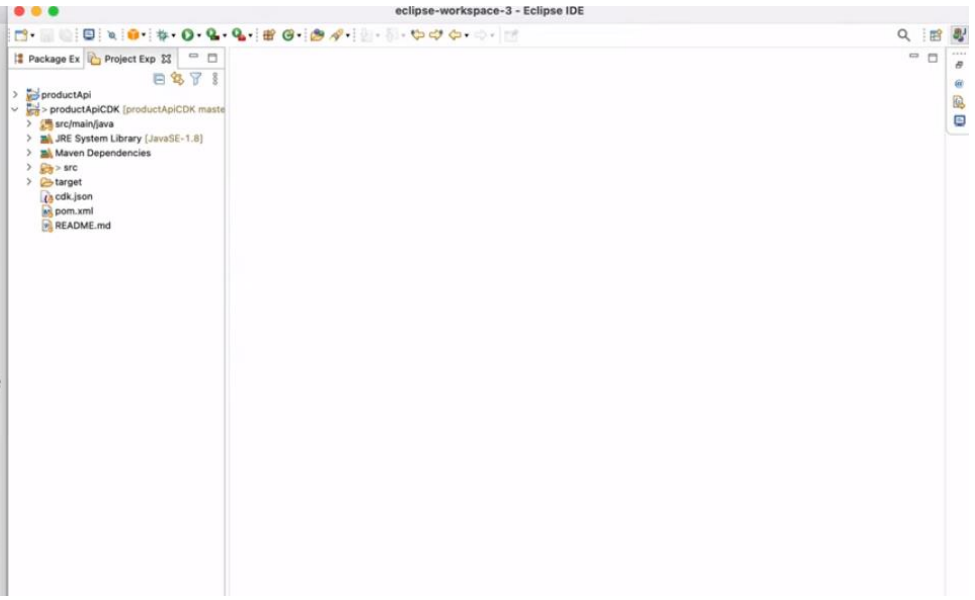

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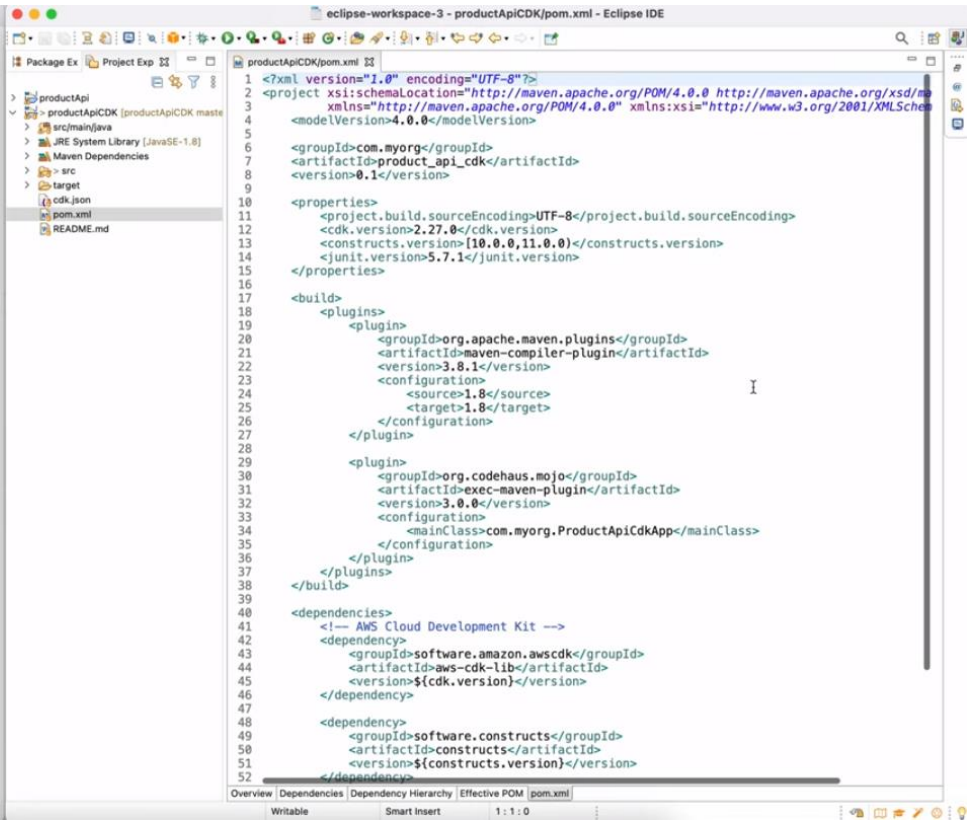

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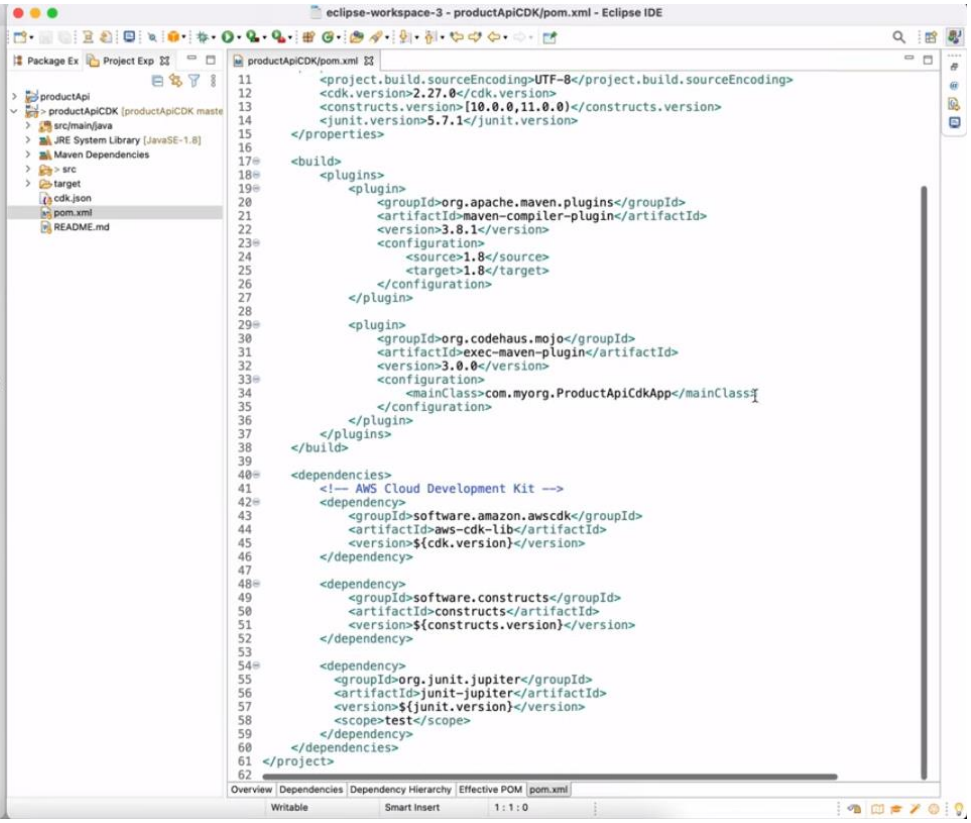

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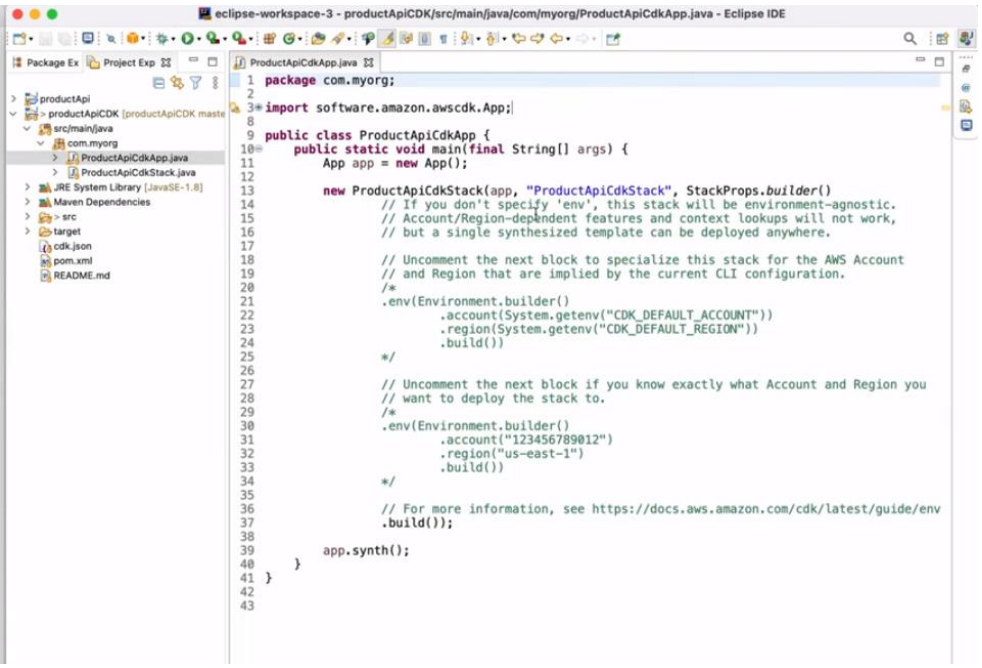

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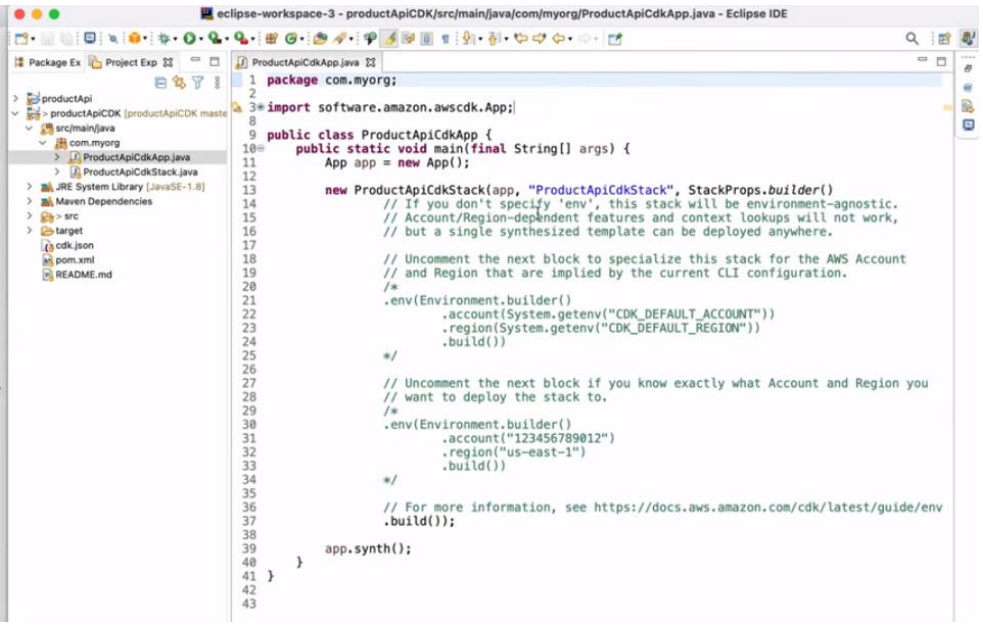

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We have already written our Lambda code to create, read, update, delete items from a DynamoDB table.

Lets have a look...

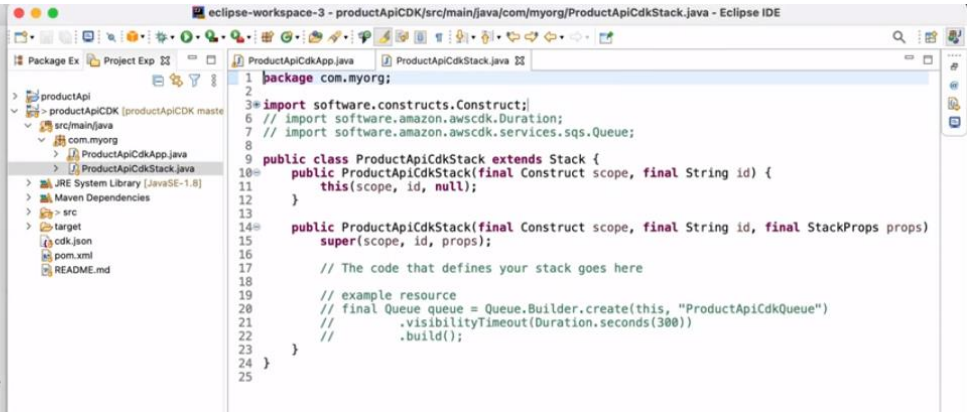
If you still need help with how to write Lambda code, there is a link in the description section

Now lets start our CDK code in JAVA

STEPS :

1. First, lets create a folder

Note : lets run $cdk init app --language java in that folder



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aws-cdk-java — Edited

We can now open the Project in an IDE

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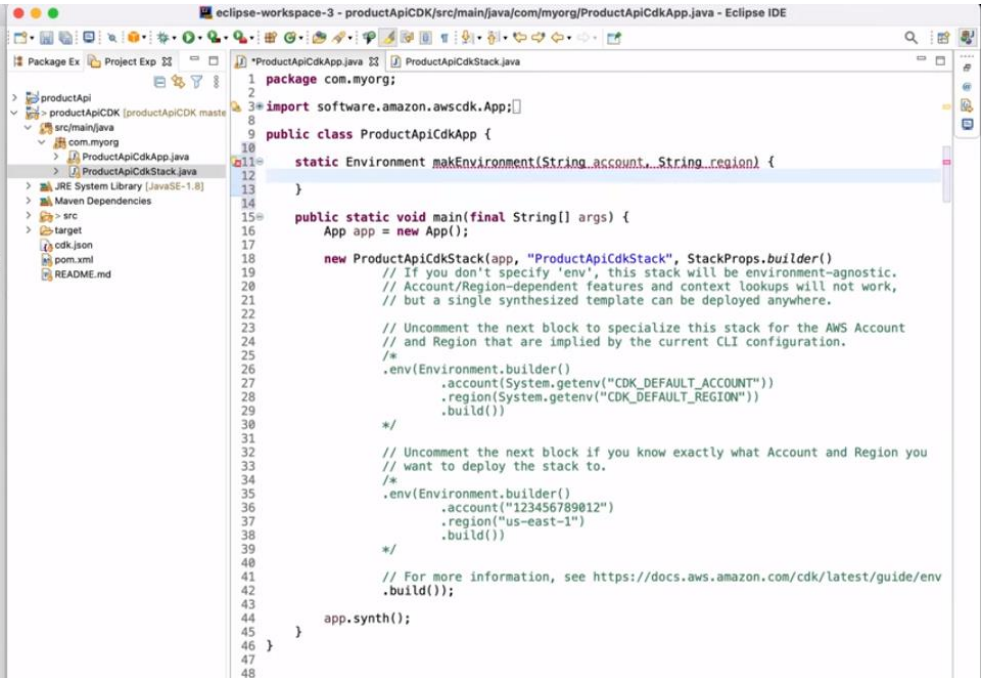

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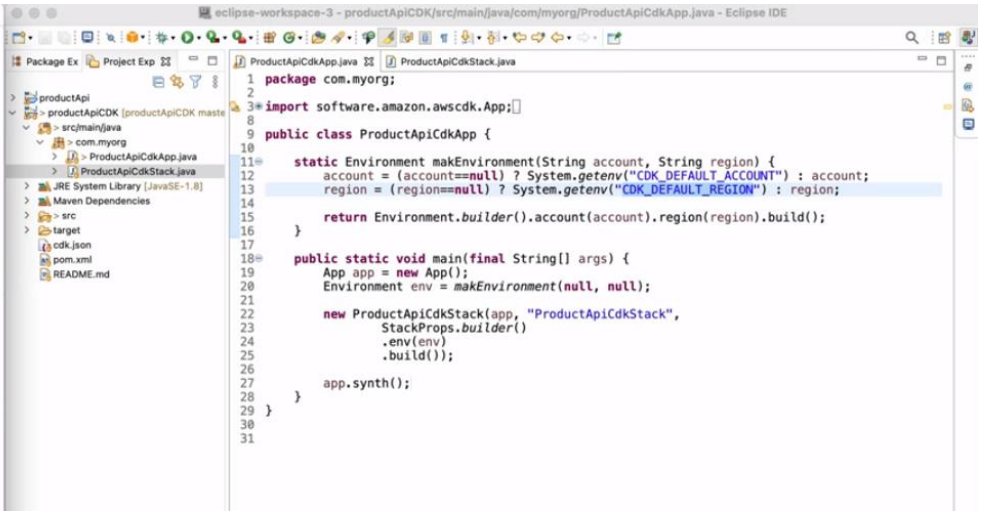

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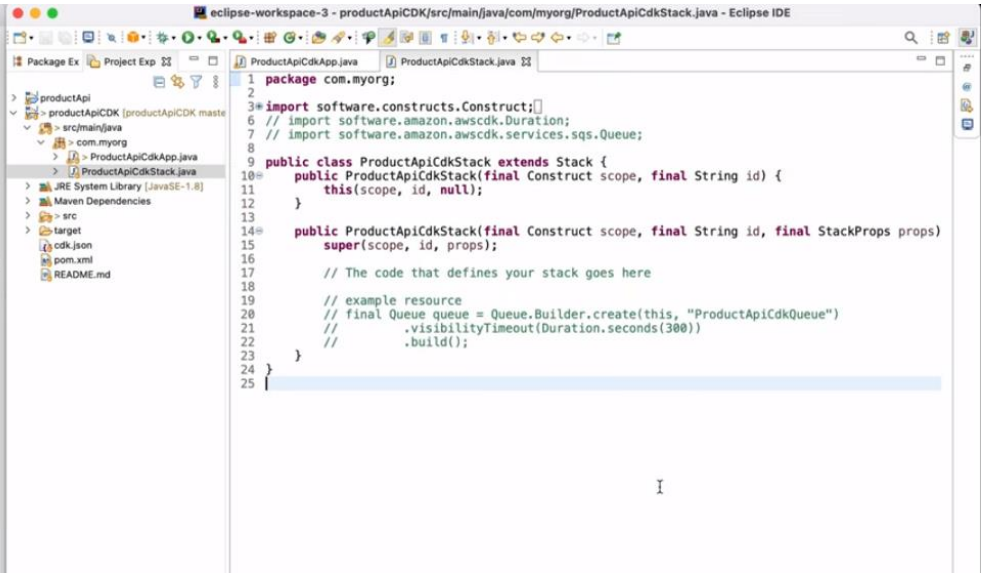

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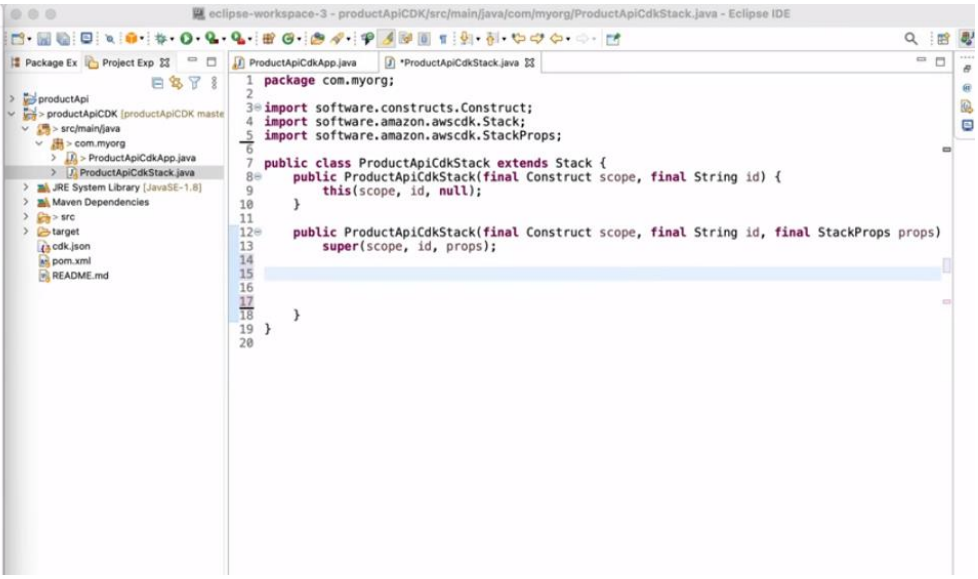

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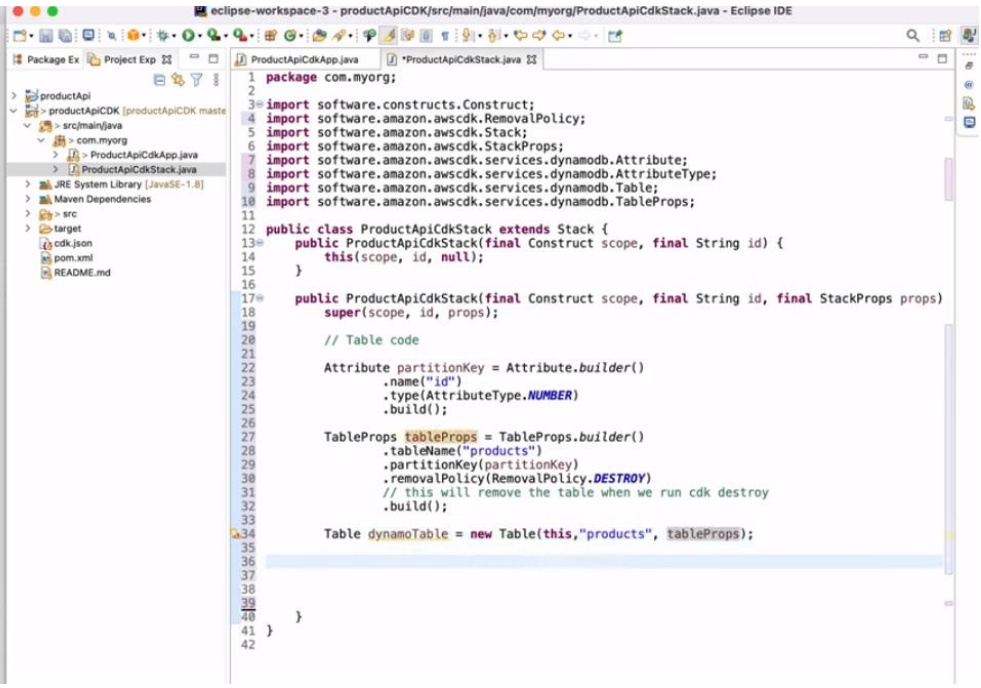

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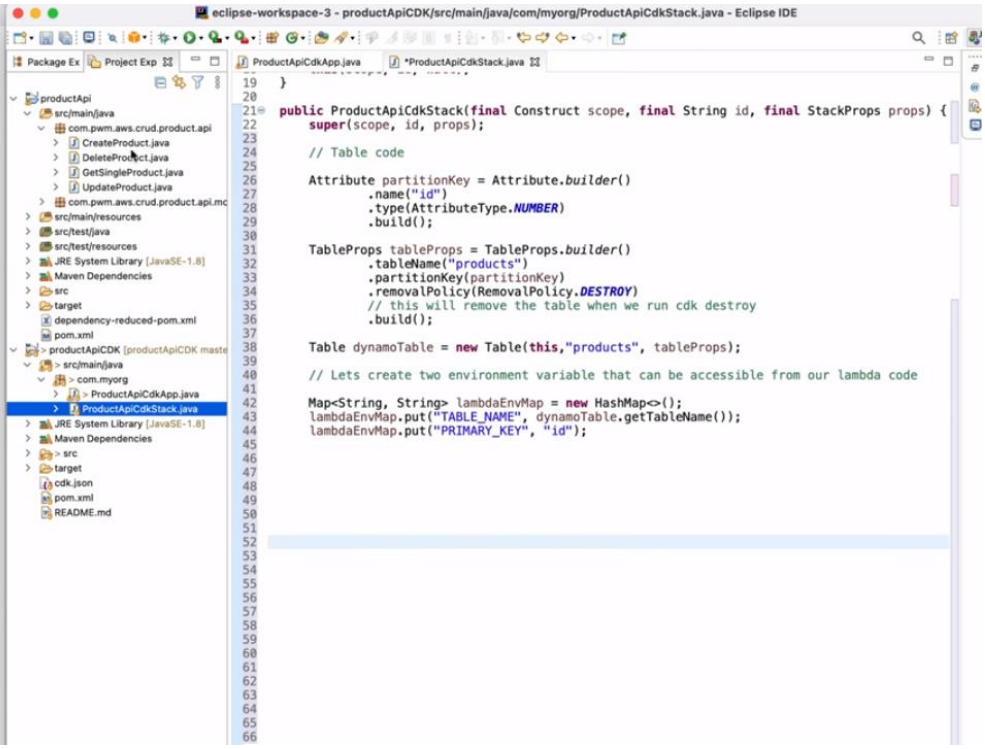

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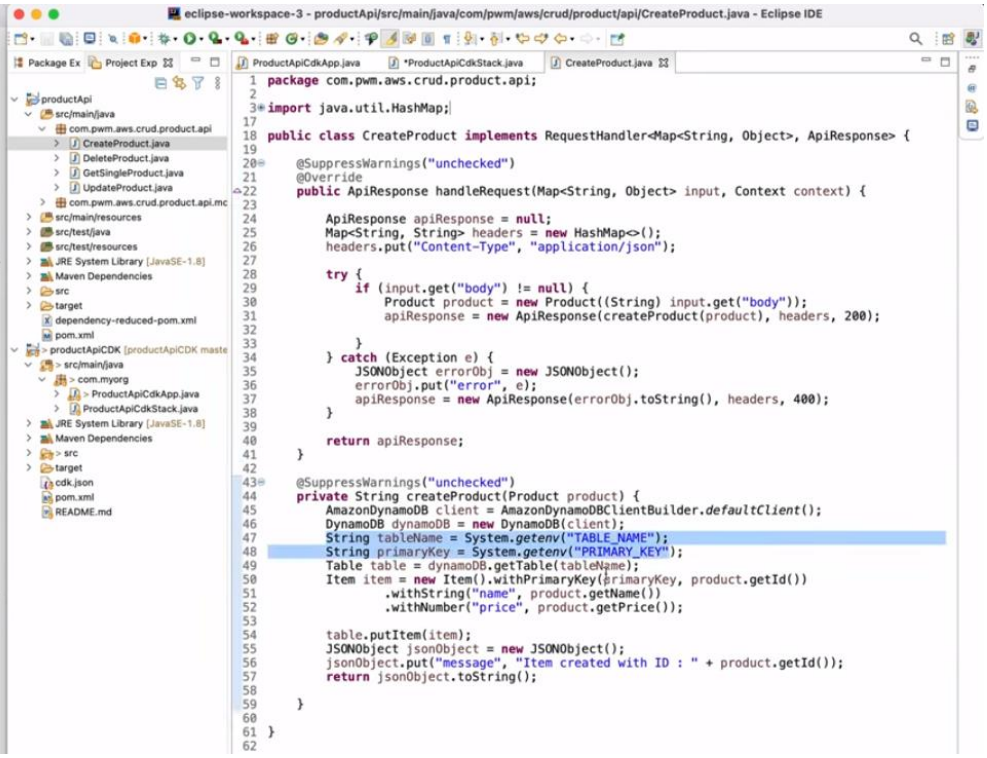

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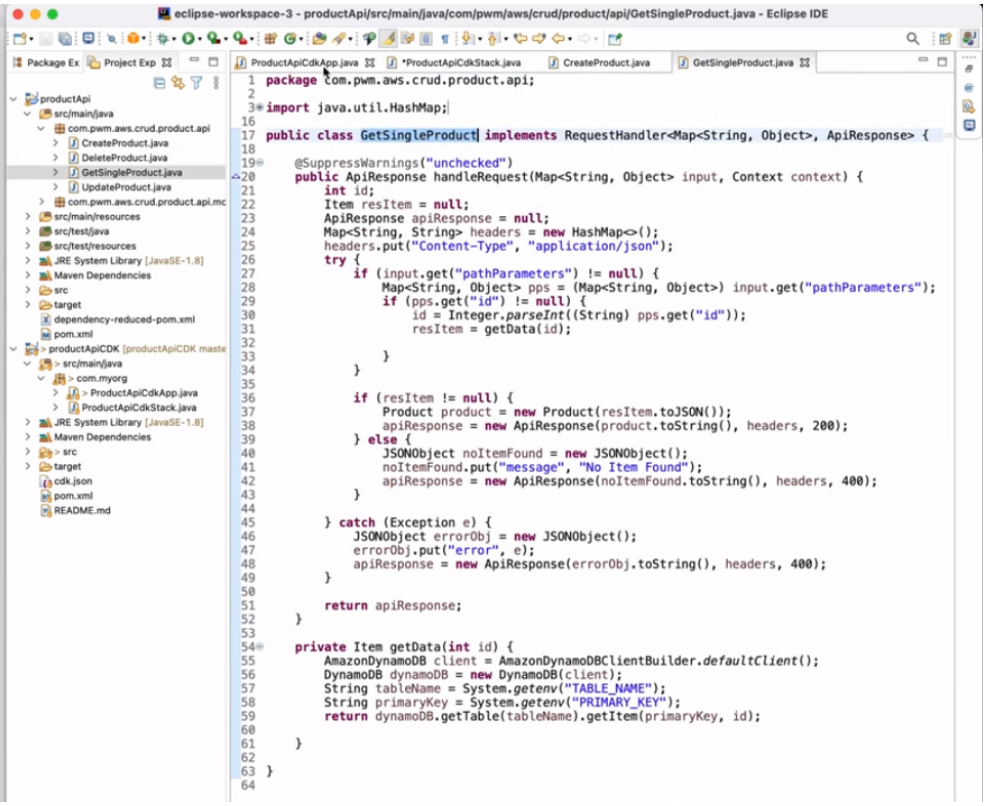

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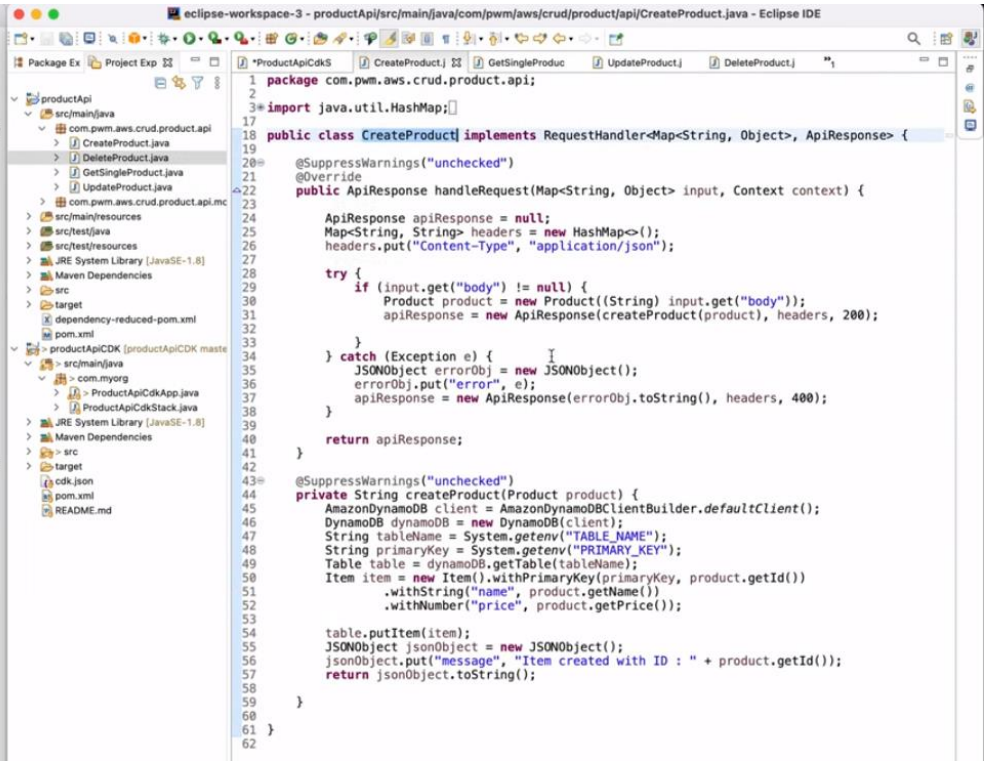

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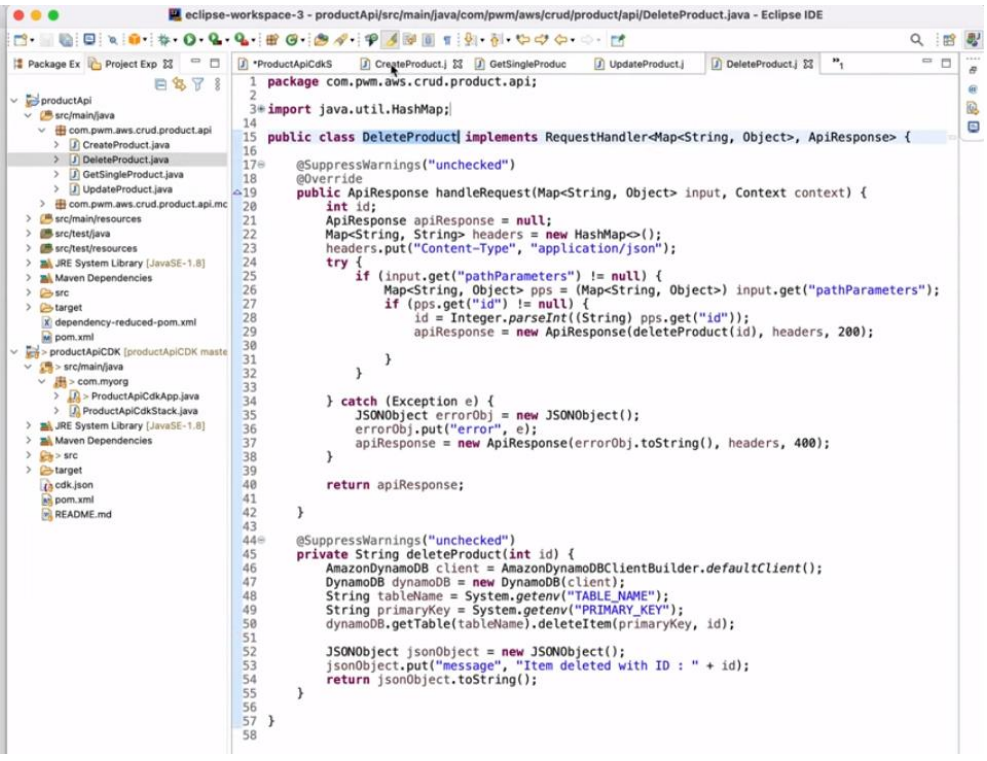

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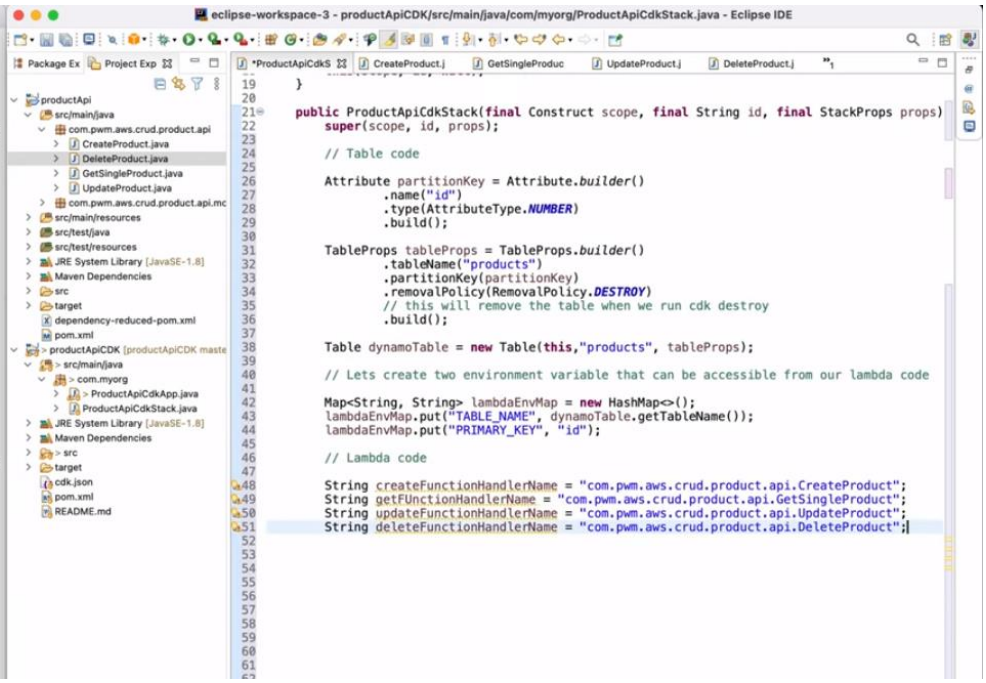

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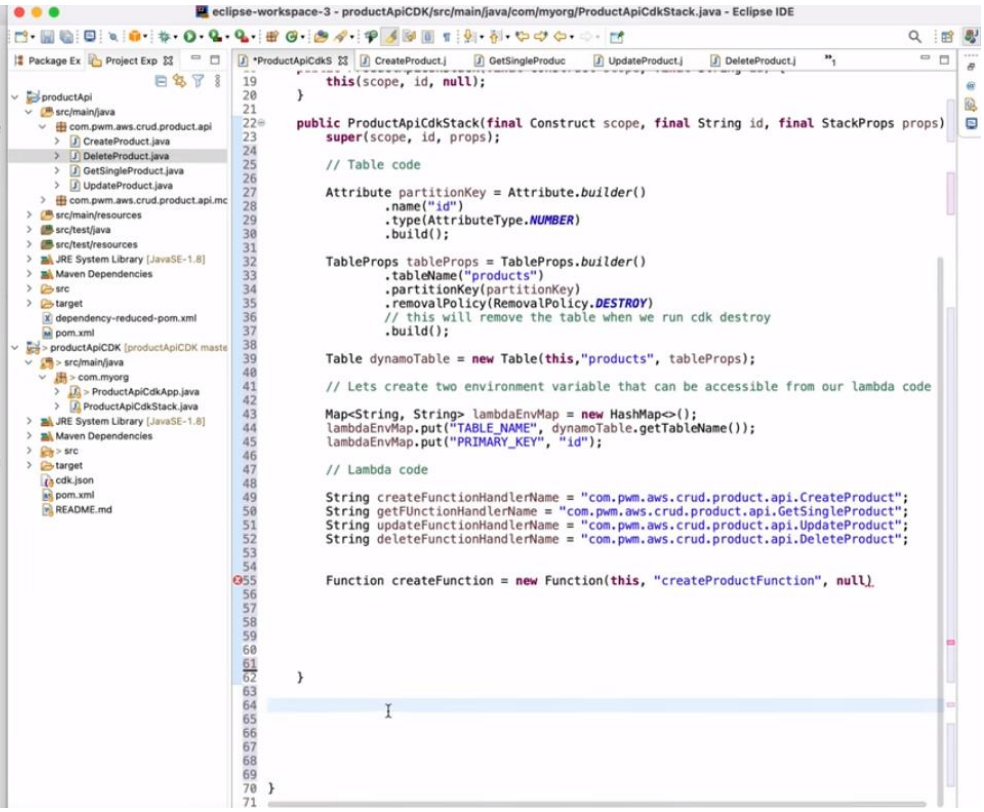

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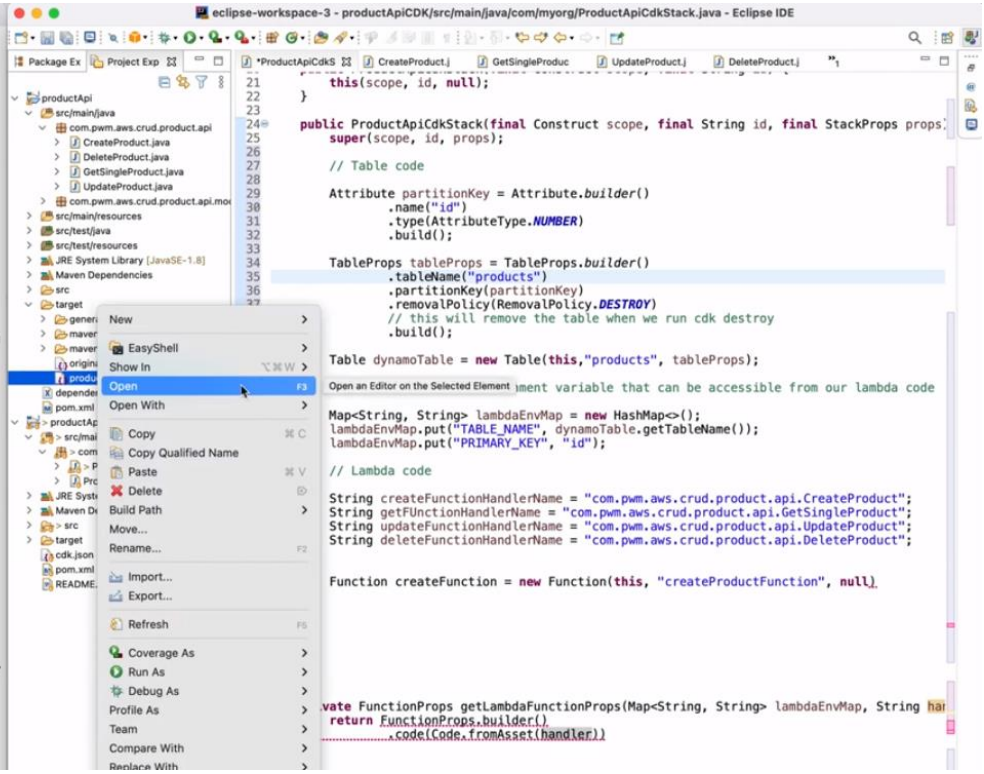

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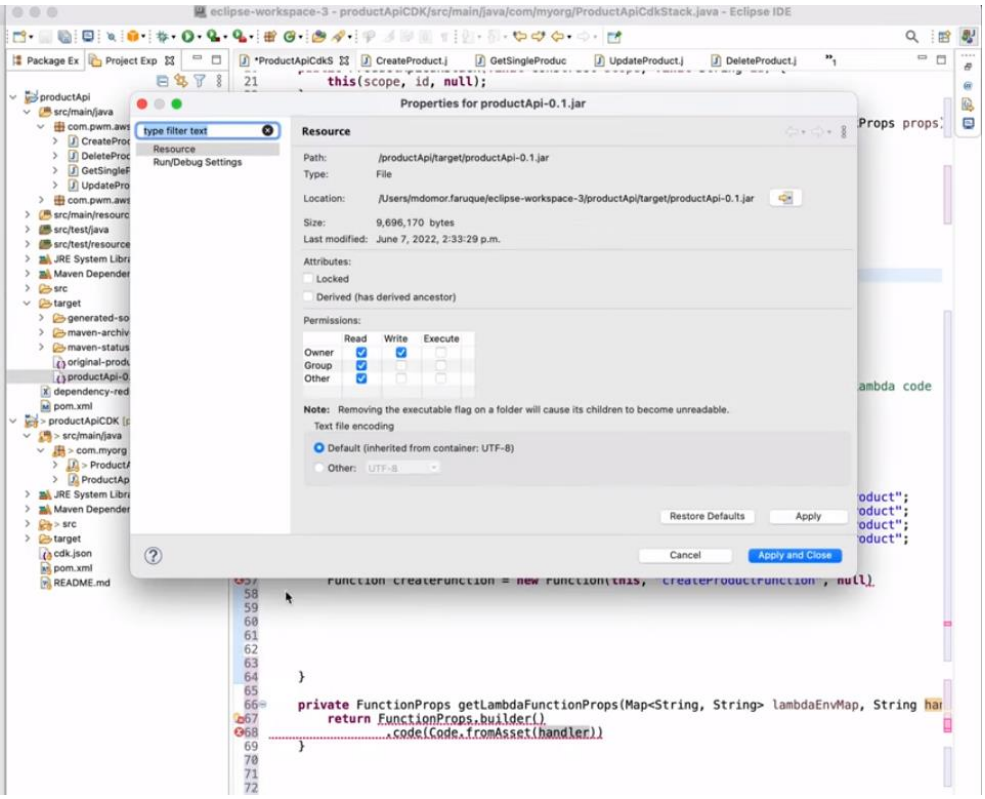

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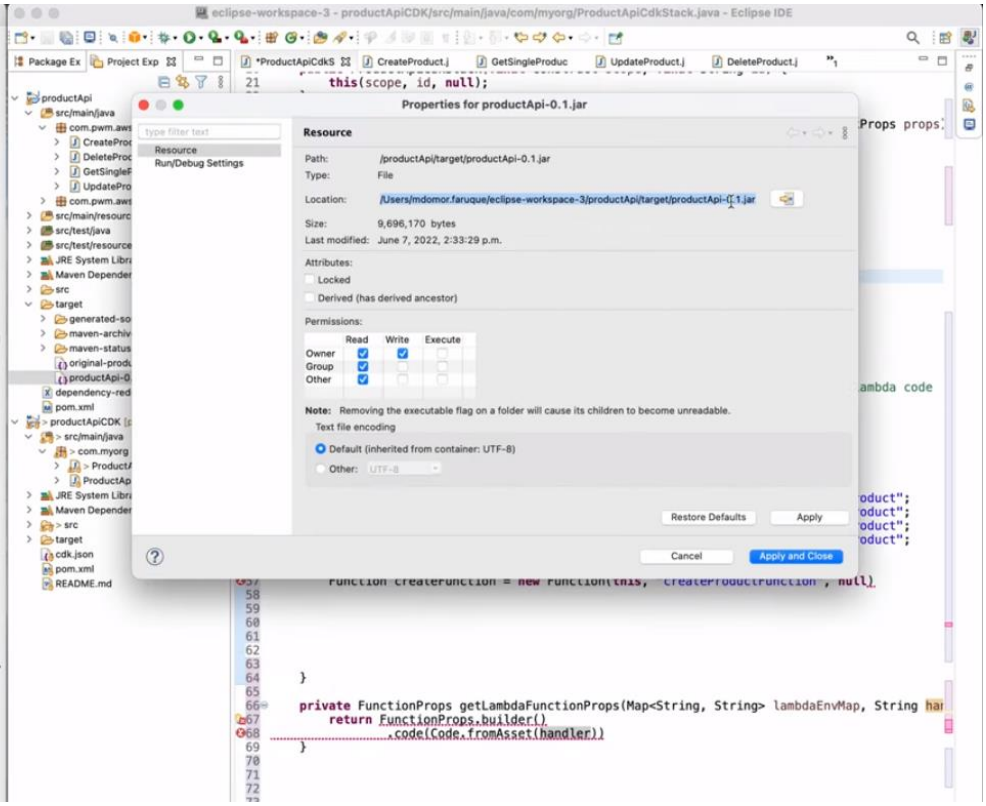

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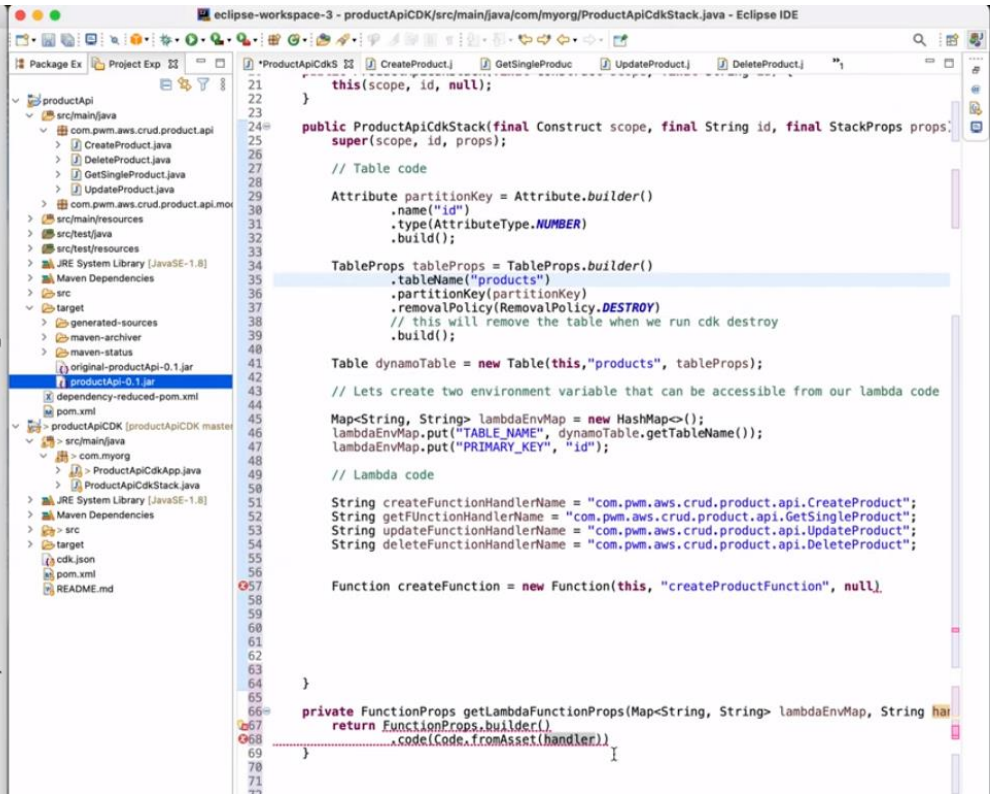

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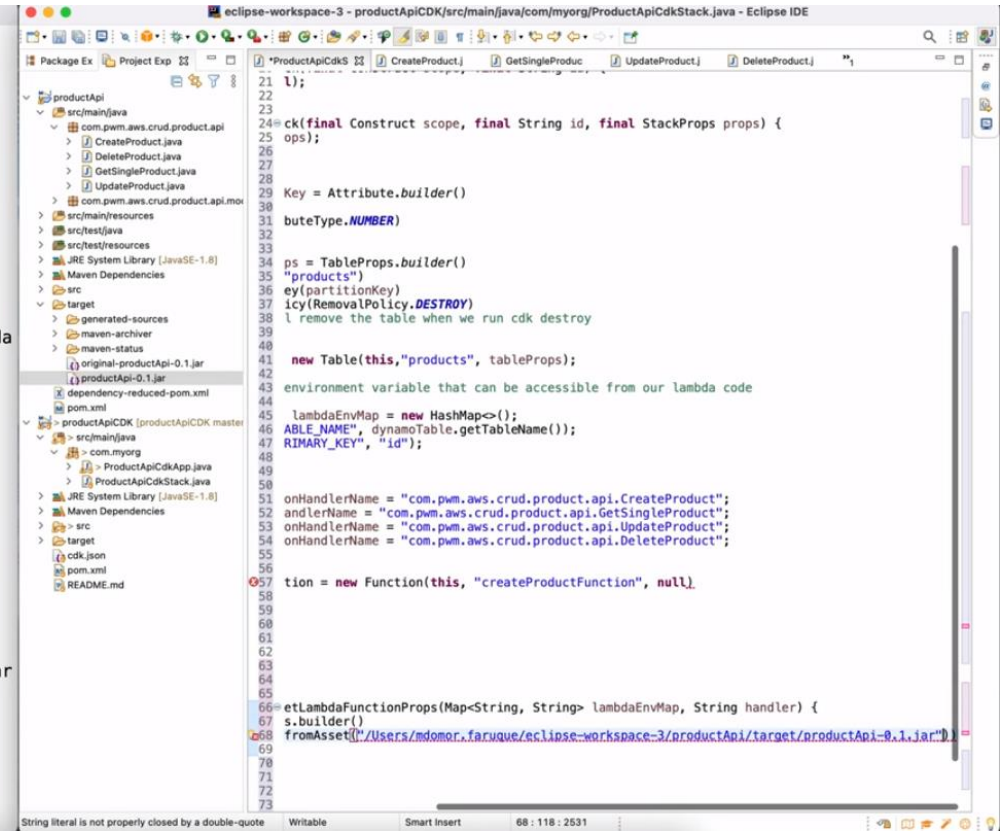

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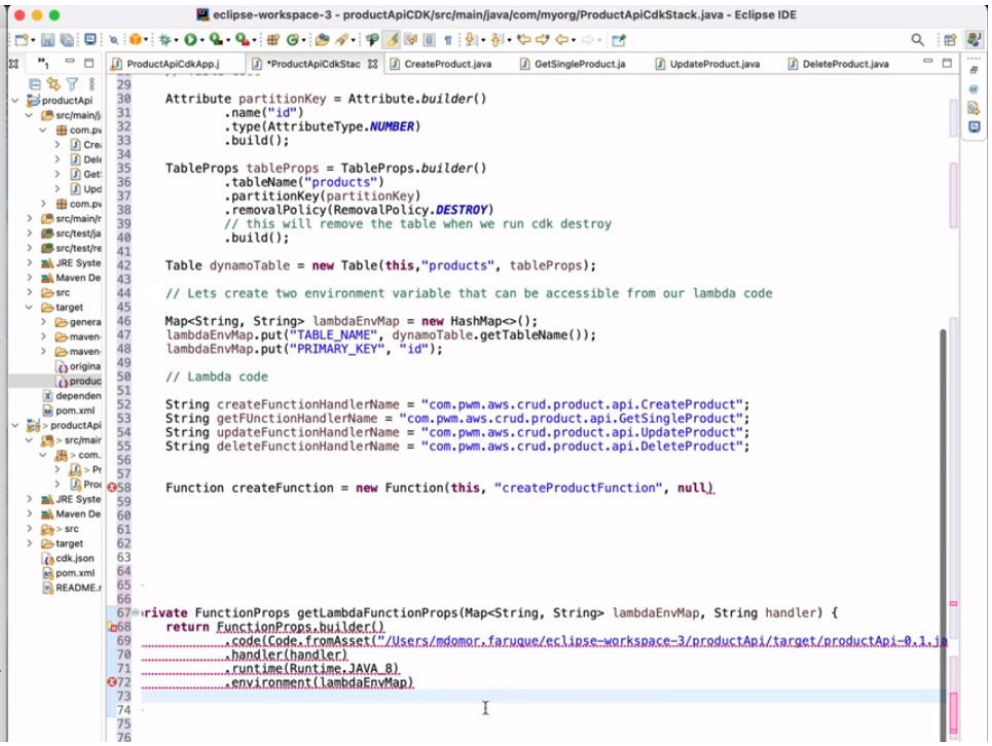

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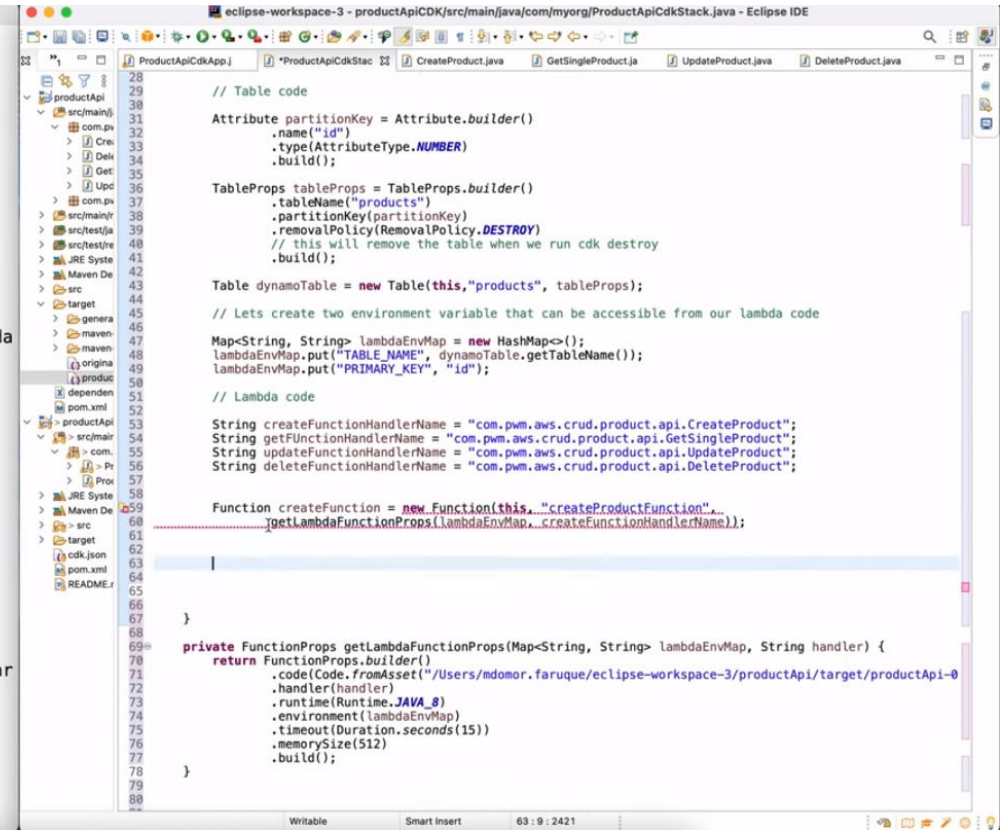

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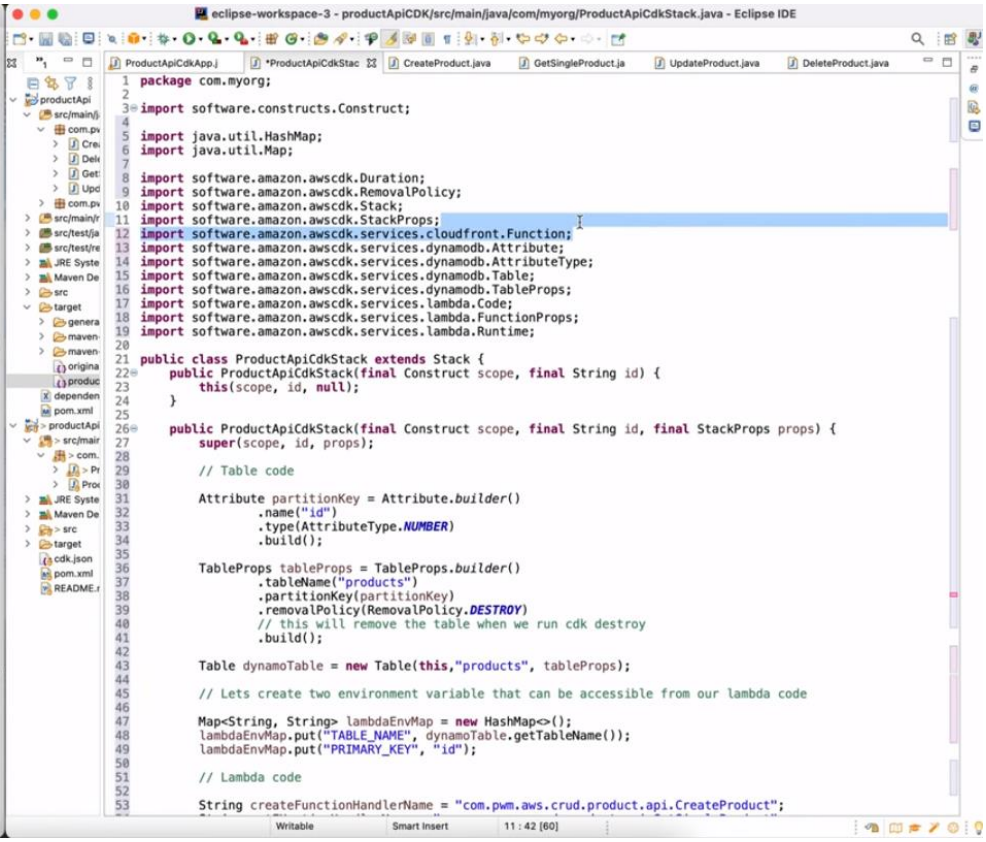

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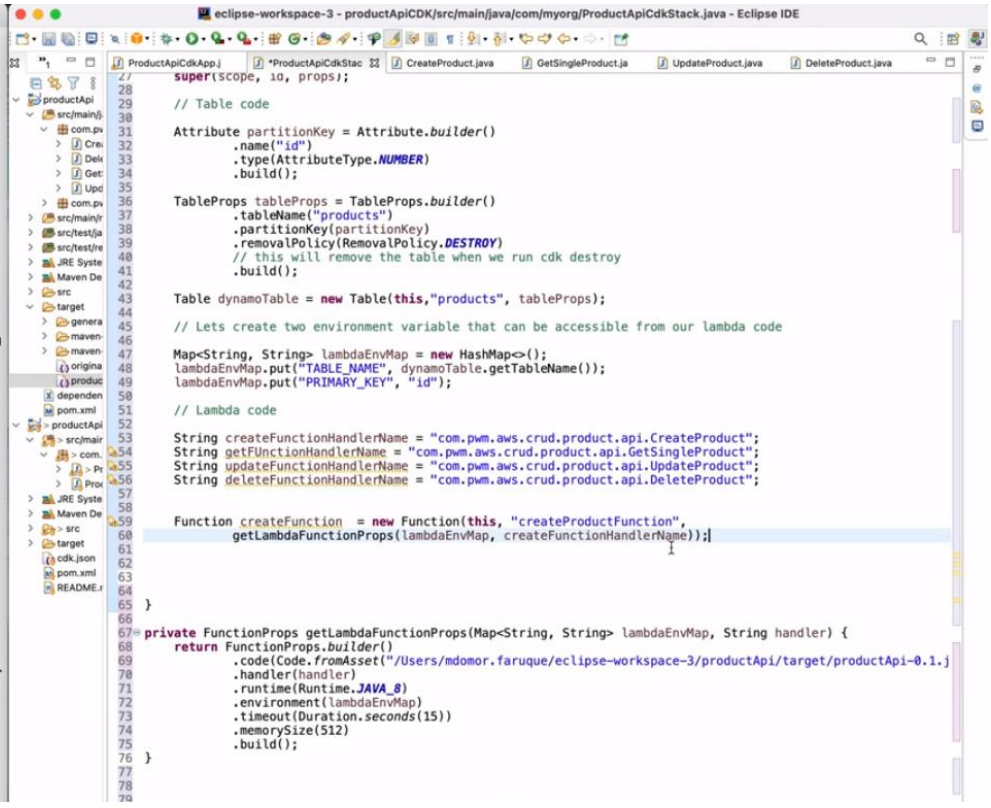

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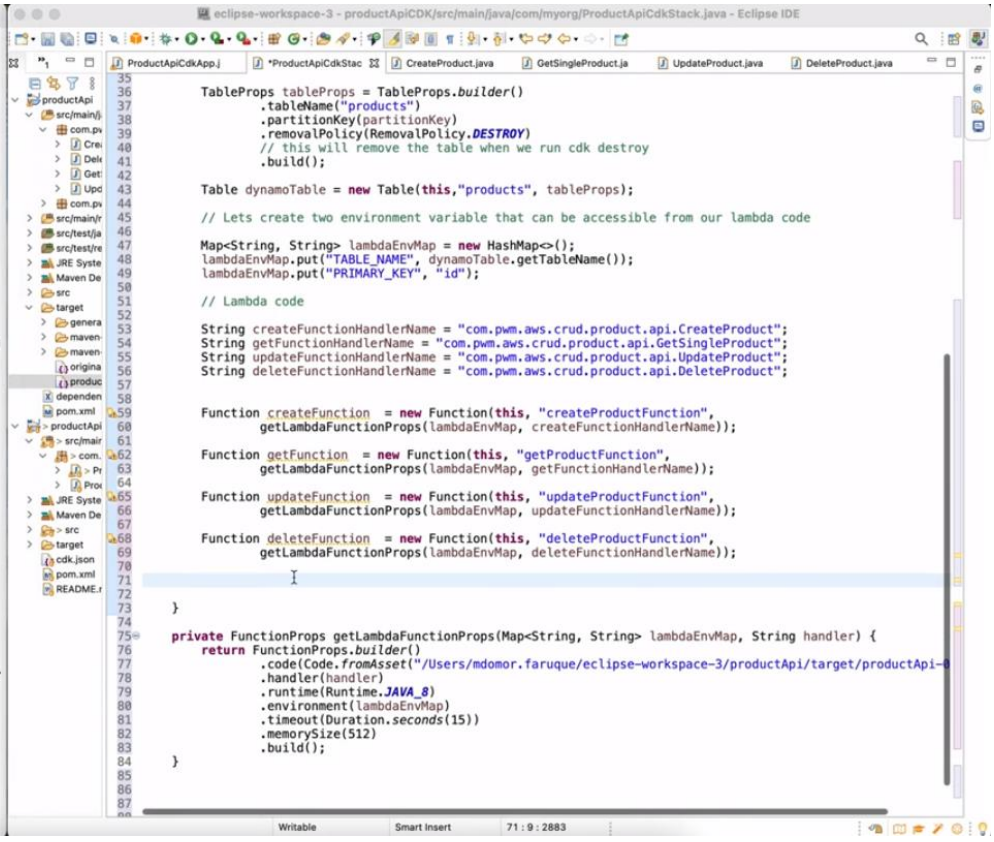

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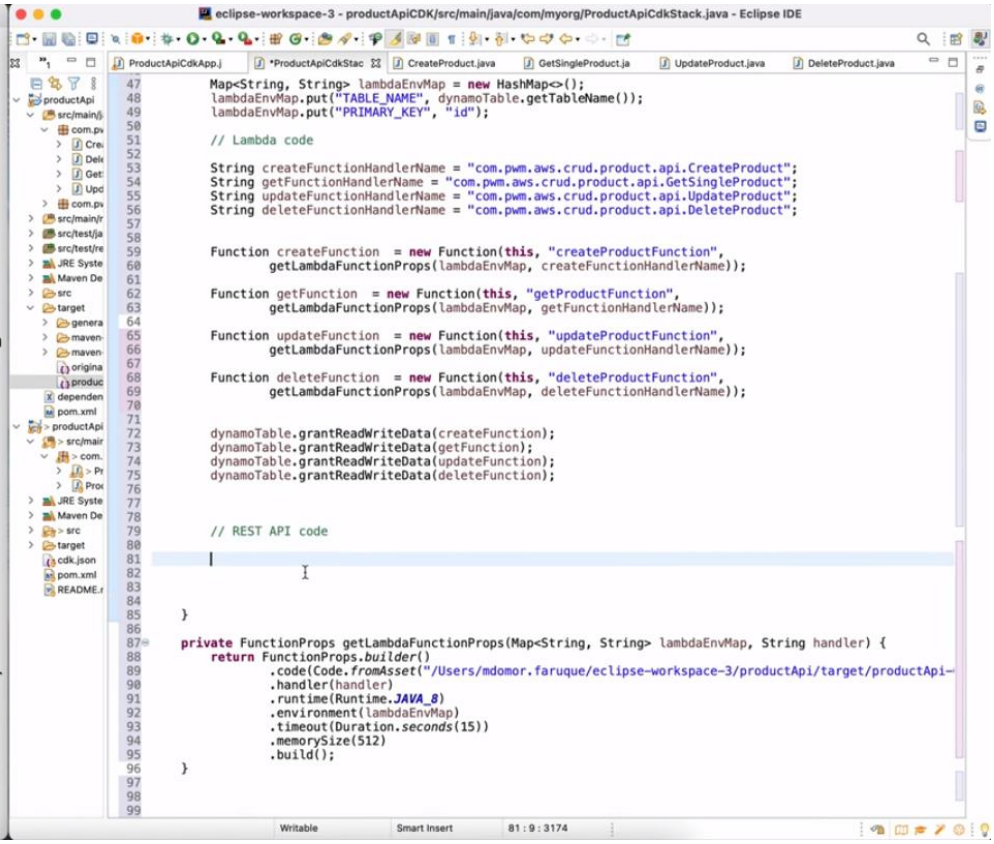

aws-cdk-java — Edited

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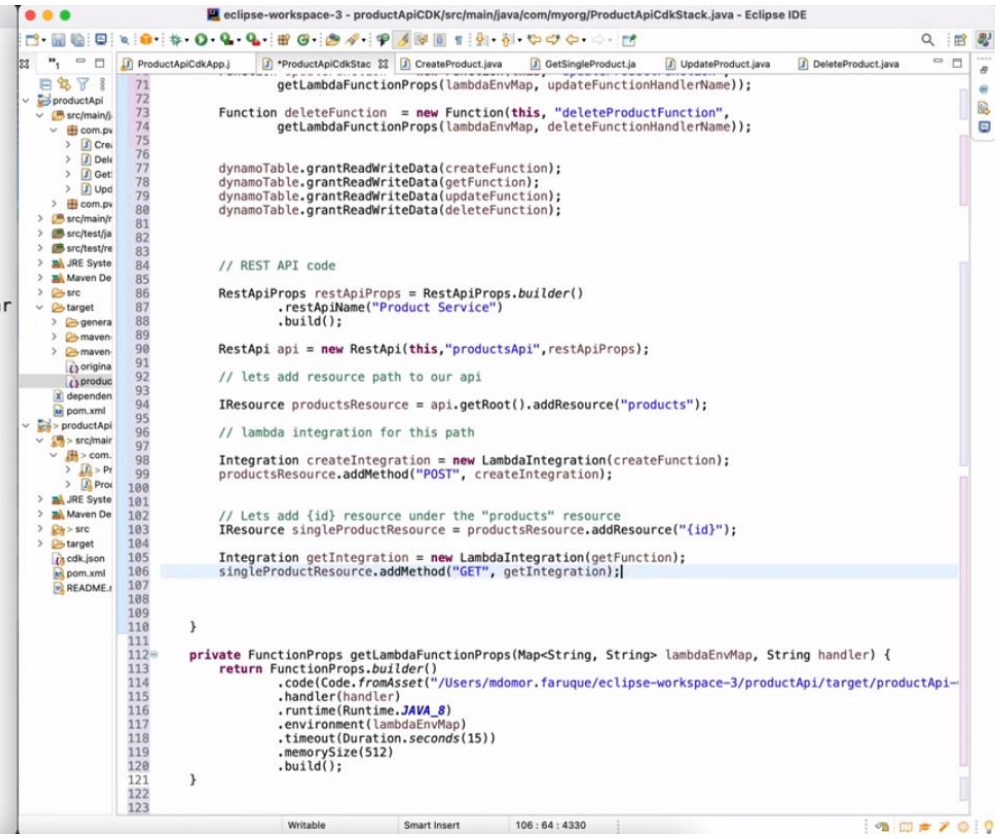

aws-cdk-java — Edited

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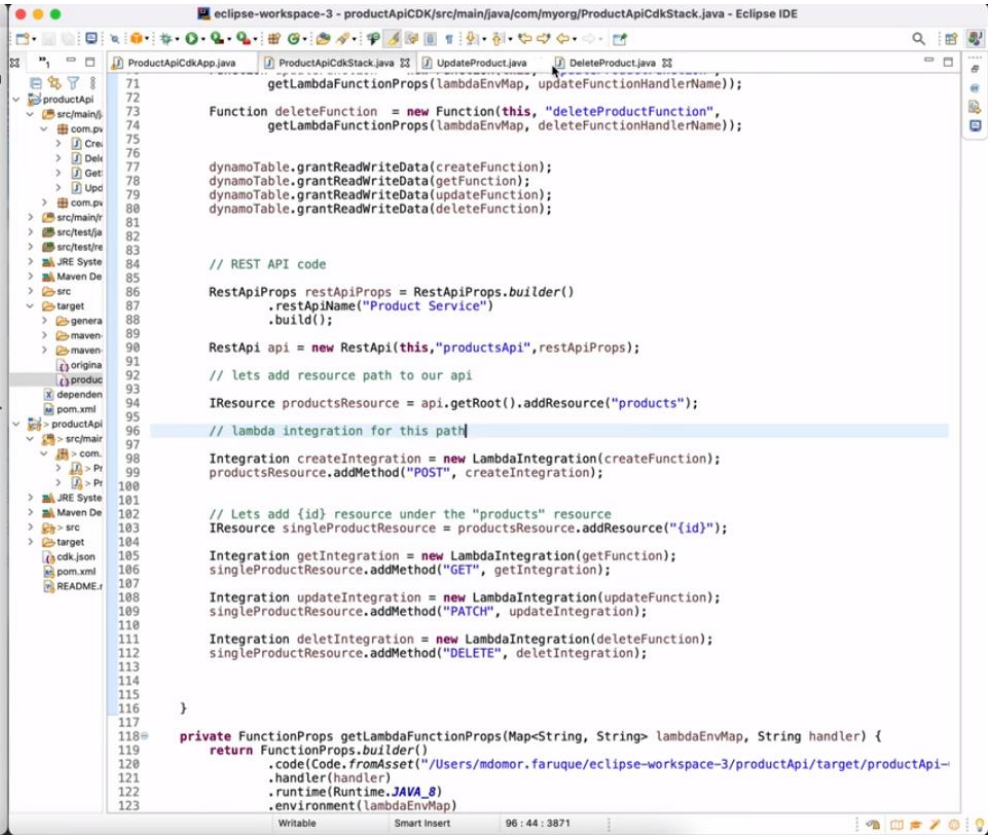

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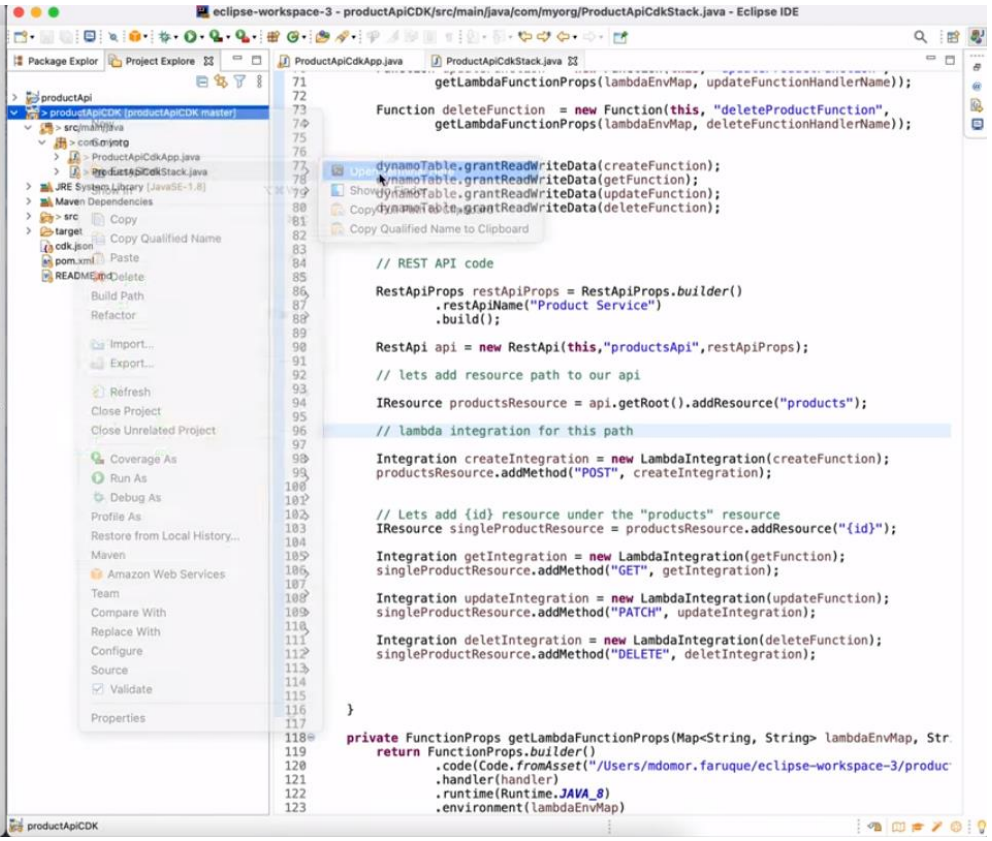

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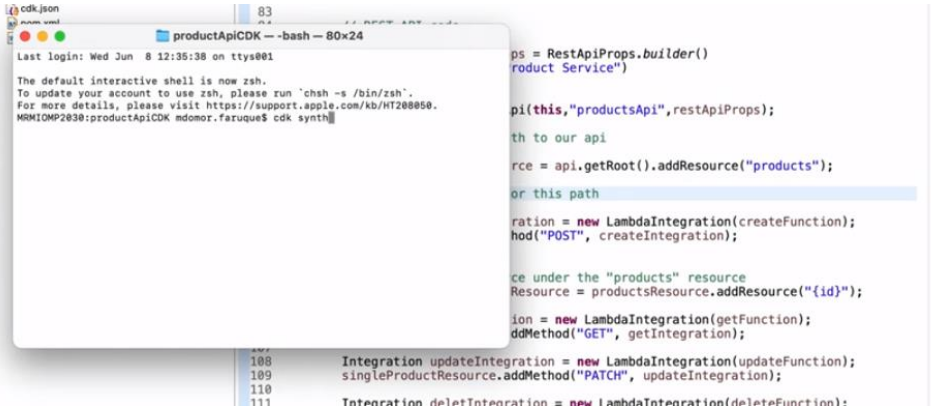

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Note : this command will print the CloudFormation template for our stack

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Note : This command will create resources required by the cdk to perform deployments in a given environment(account/region)

We only need to use the bootstrap command once for every environment (account/region). If we use the command more that once, the cdk will check if our CDKToolkit stack has to be updated. if required the stack will be updated. If not, running the bootstrap command does nothing.

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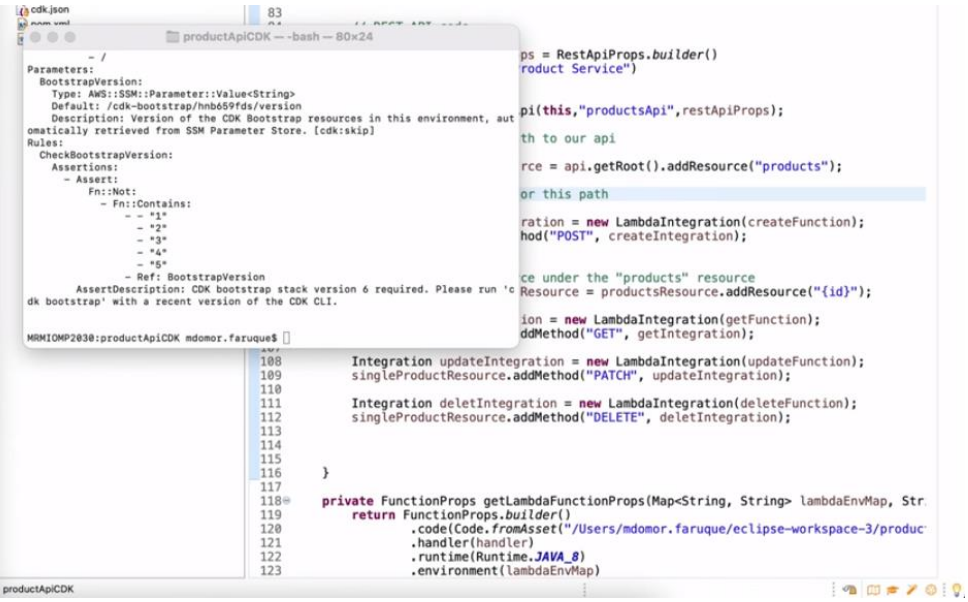

aws-cdk-java — Edited

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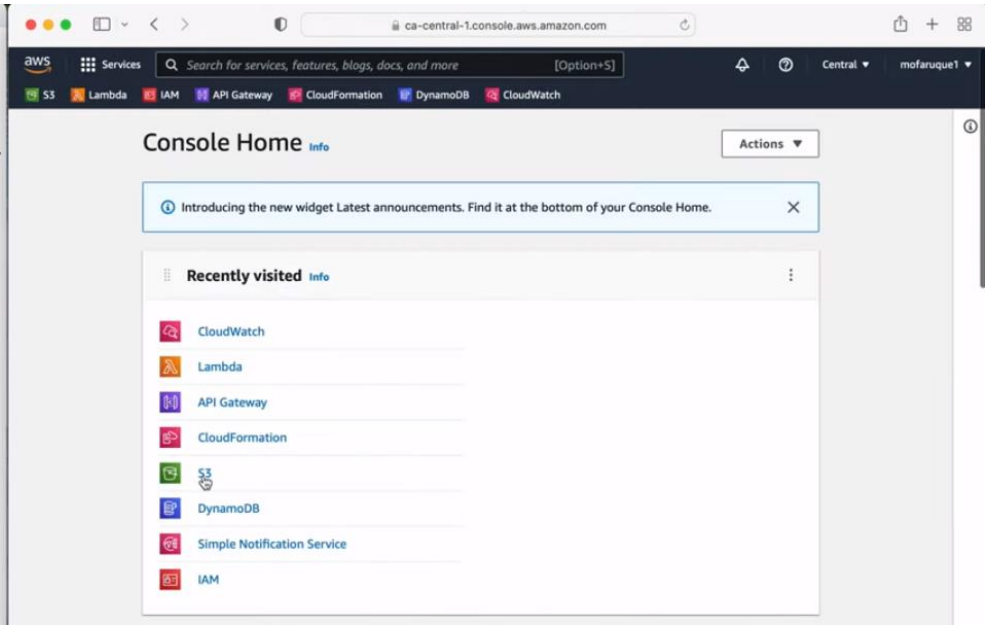

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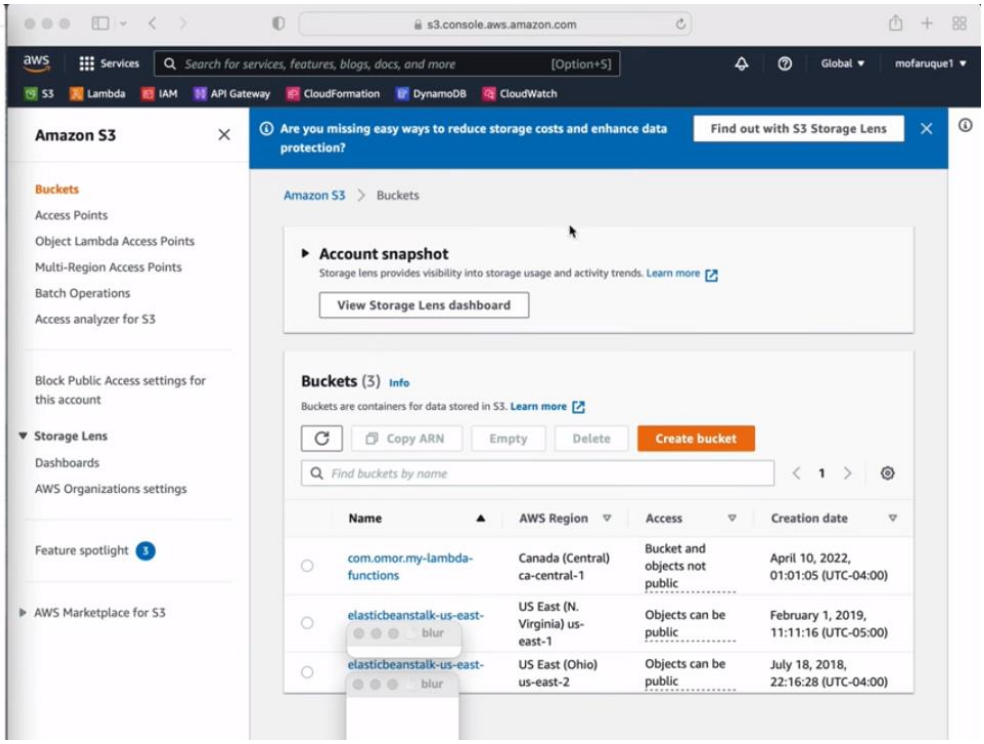

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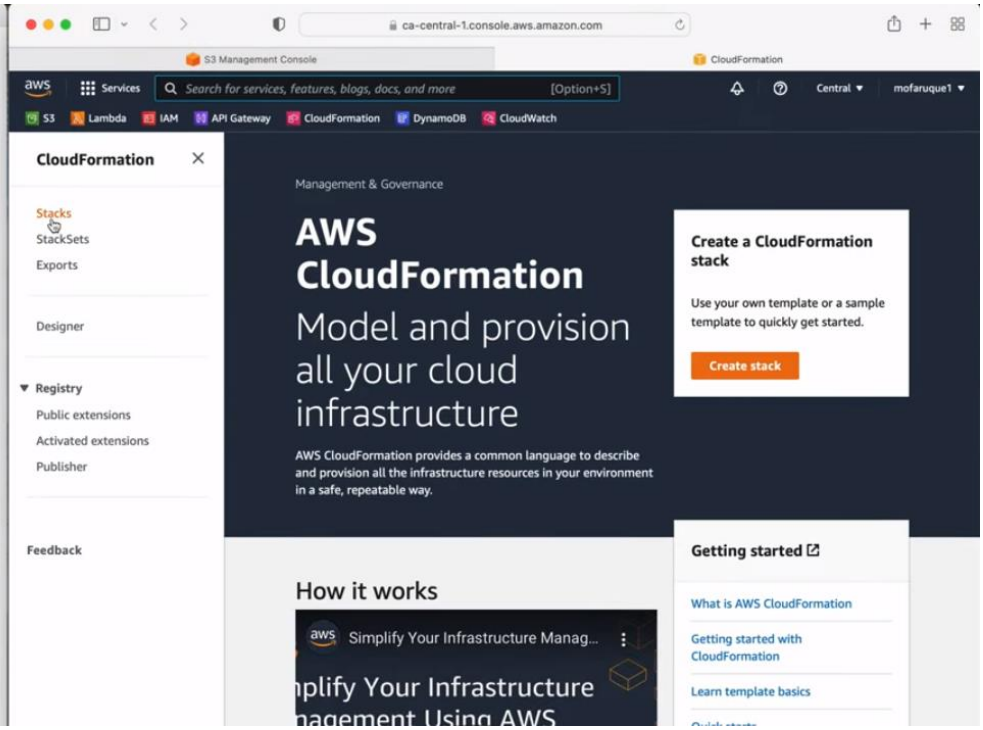

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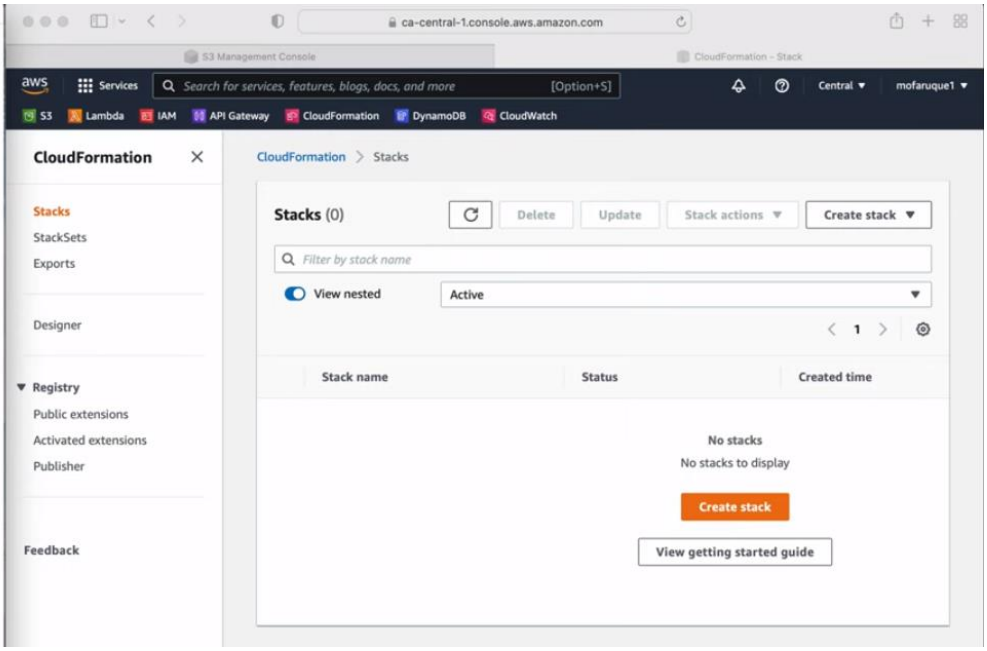

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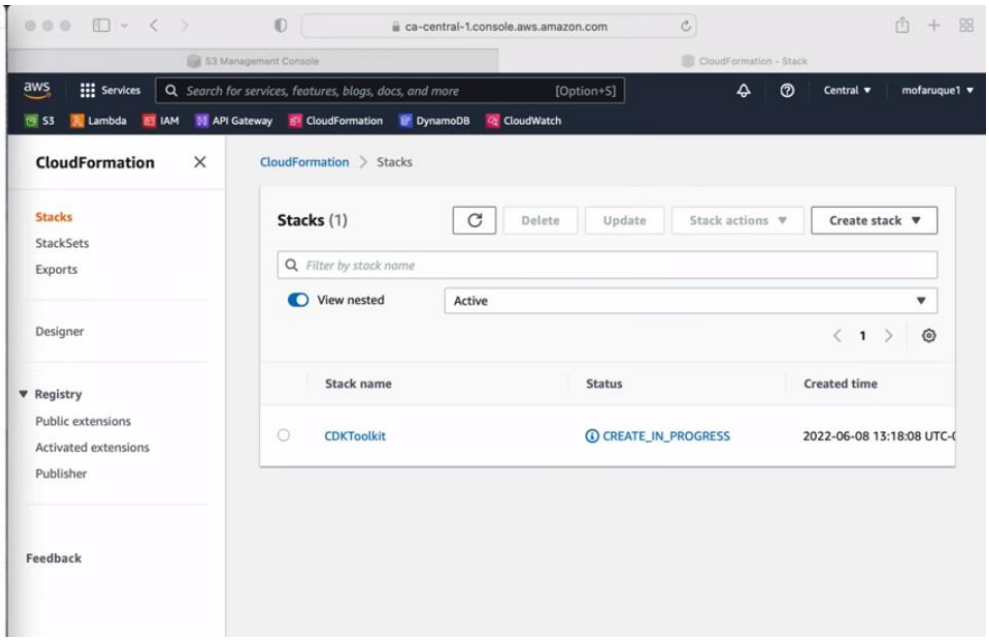

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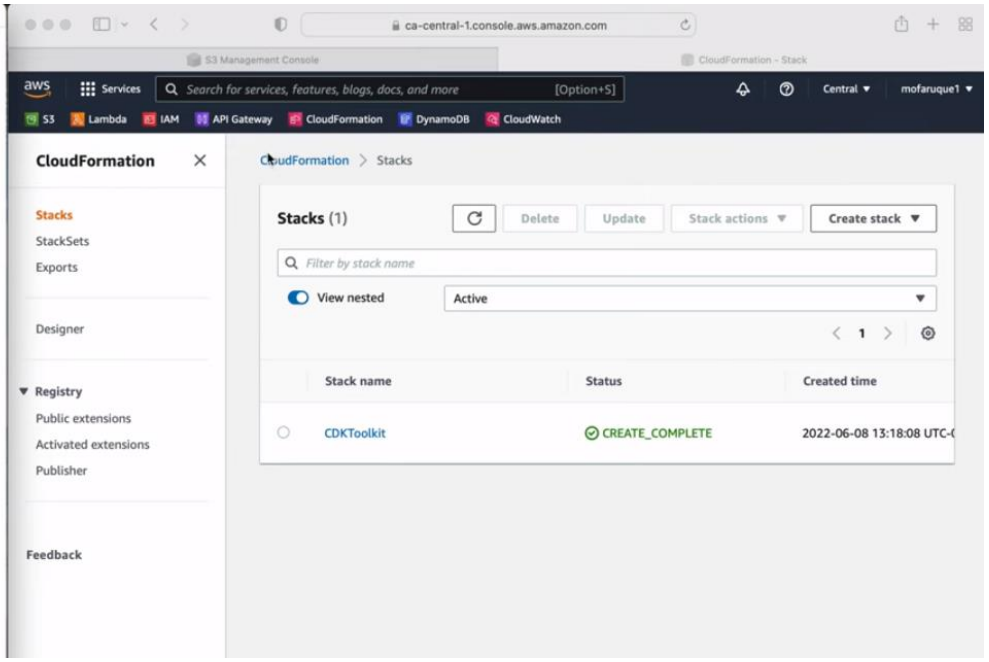

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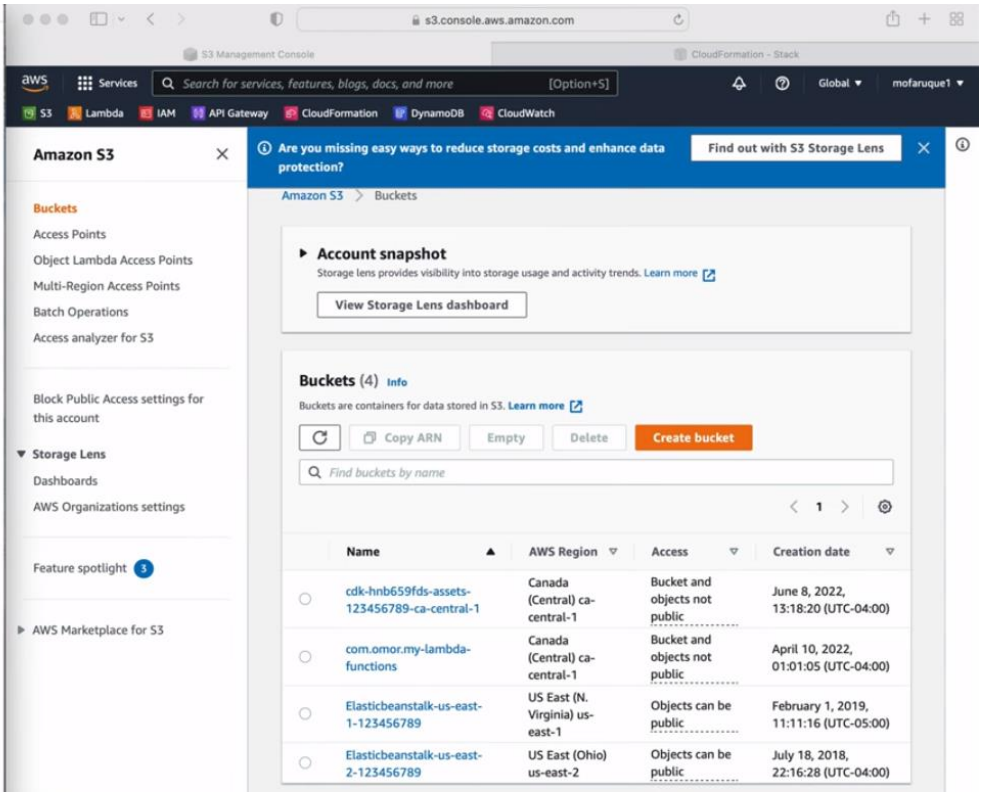

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> it should say BUILD SUCCESS

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This command will create all the functions, dynamo table and api gateway

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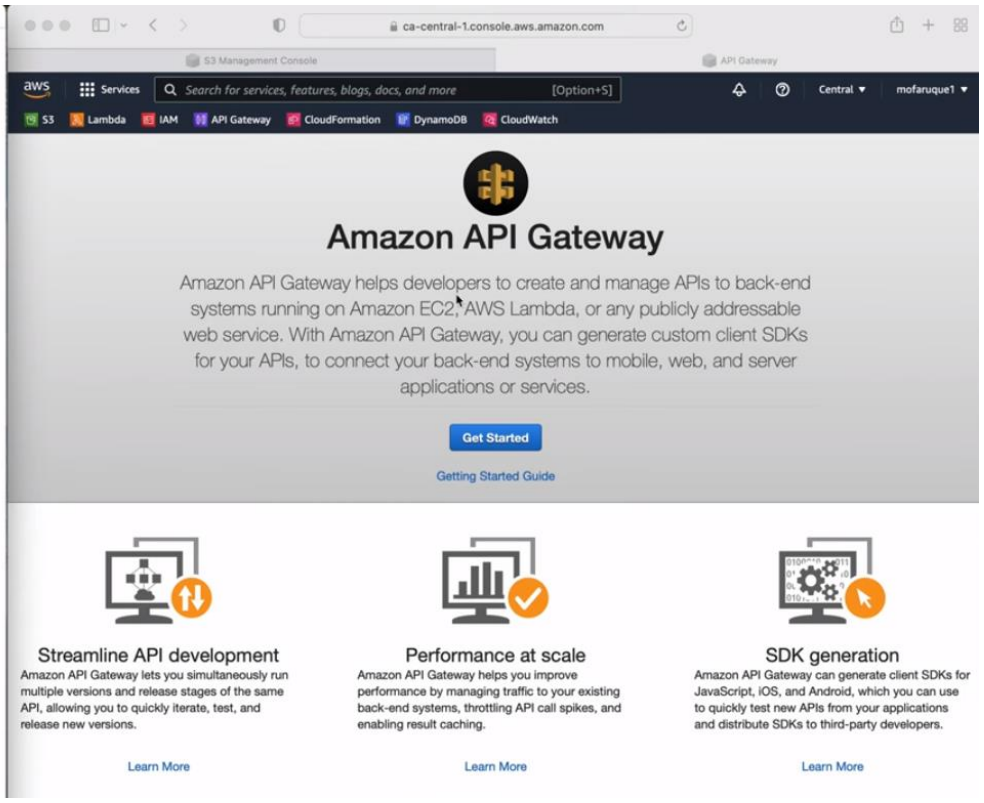

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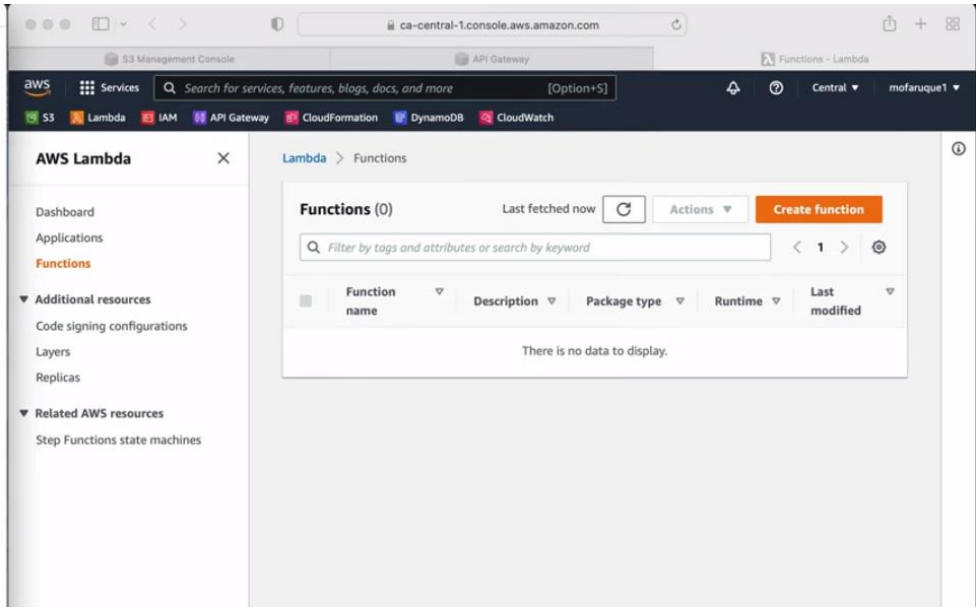

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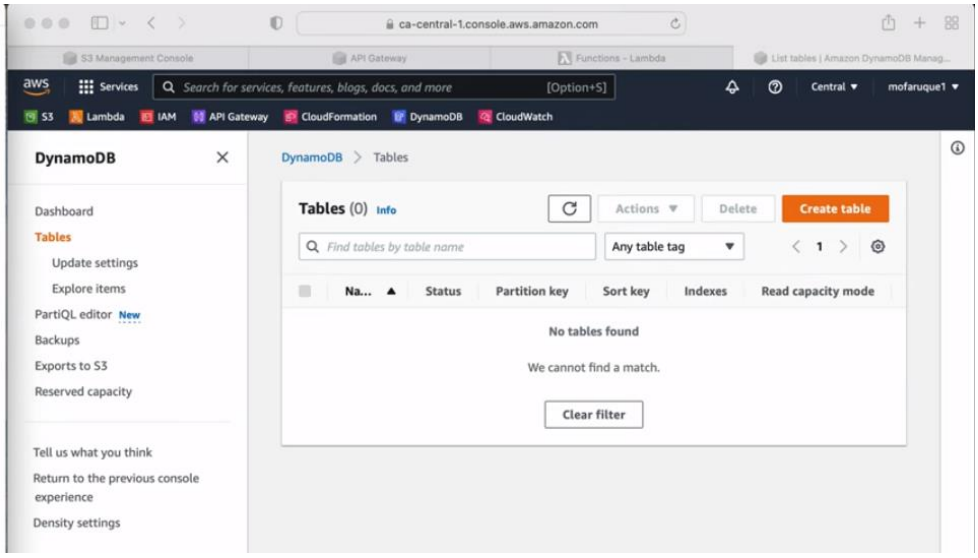

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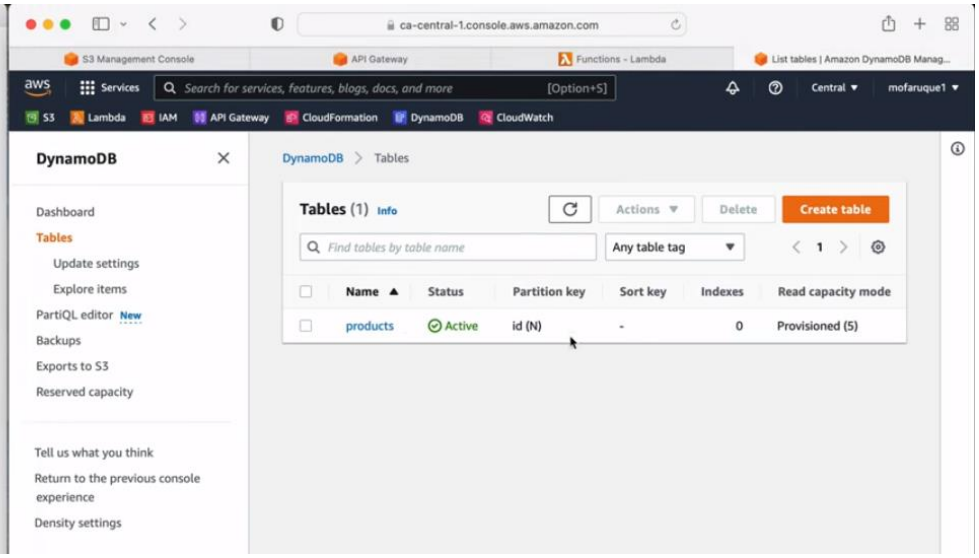

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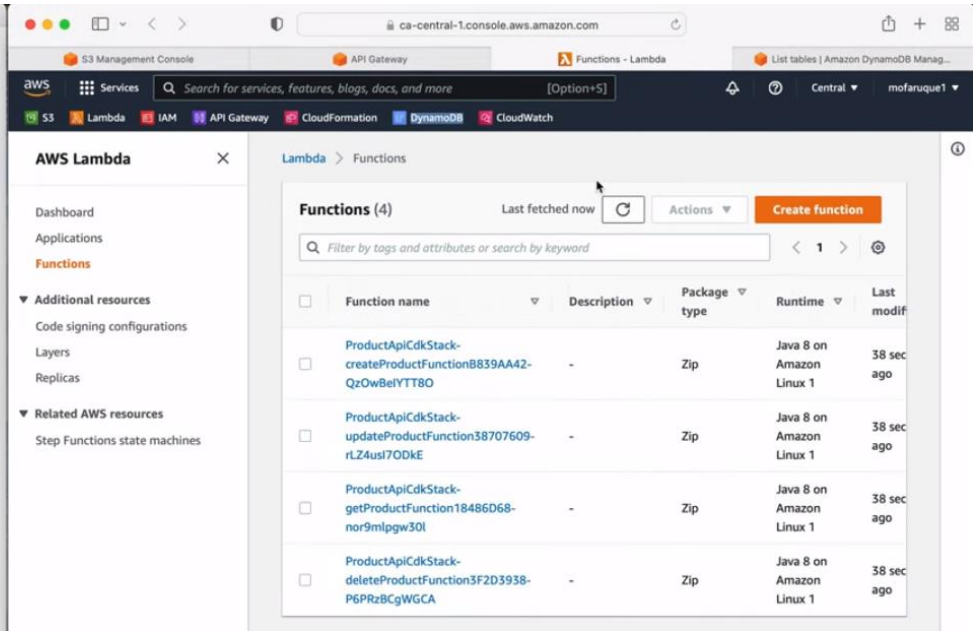


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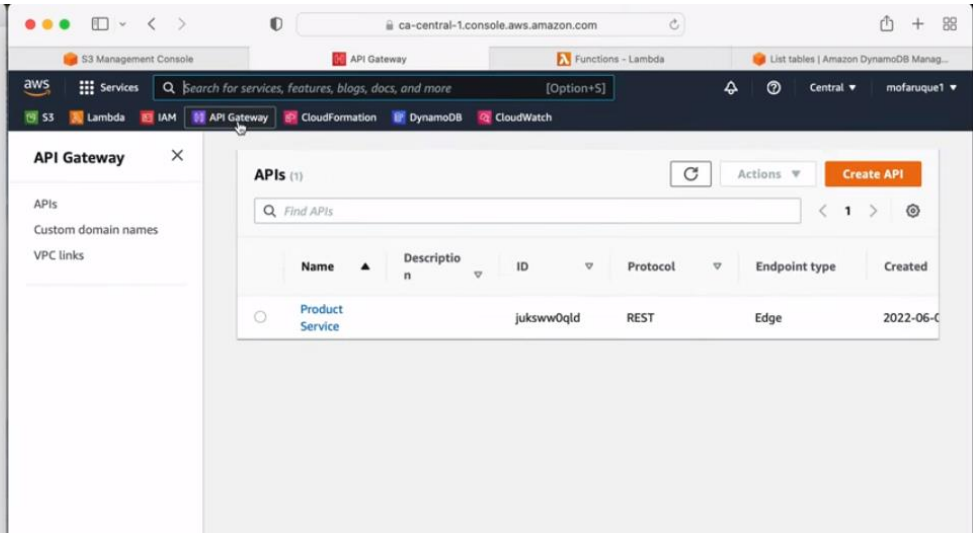


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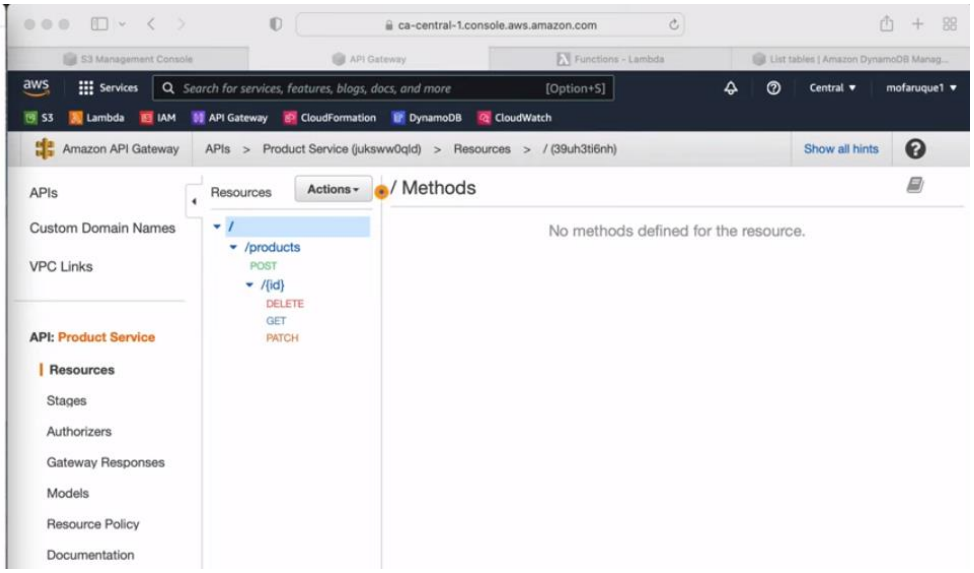

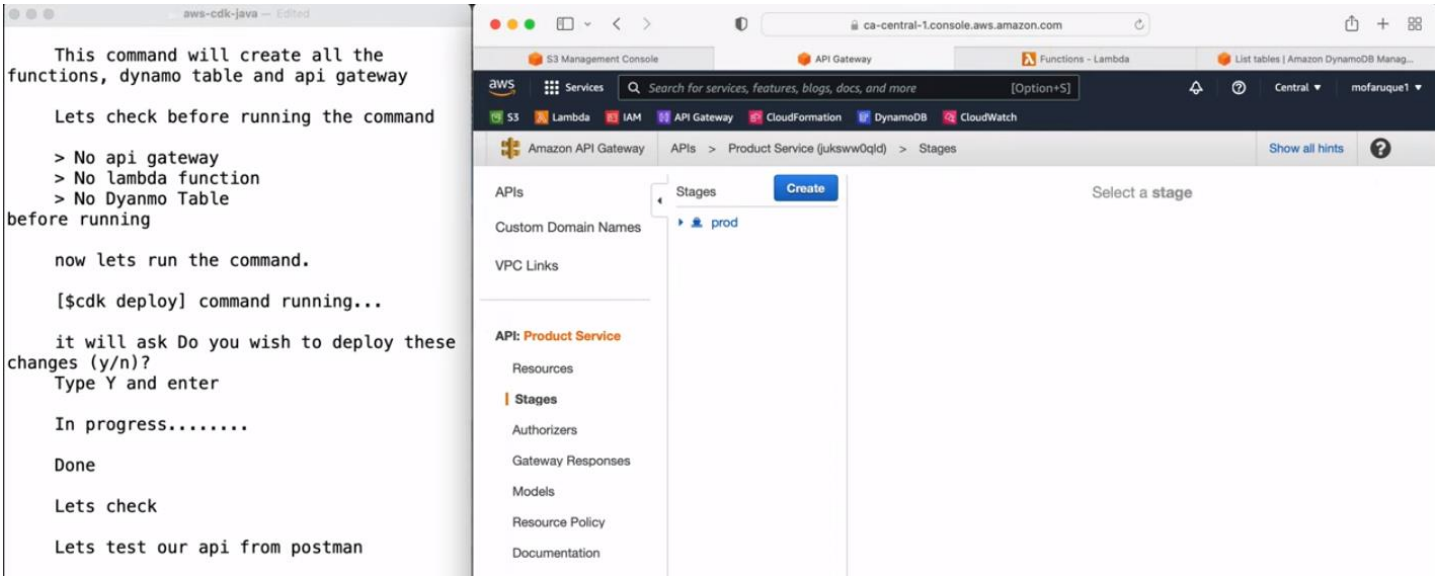
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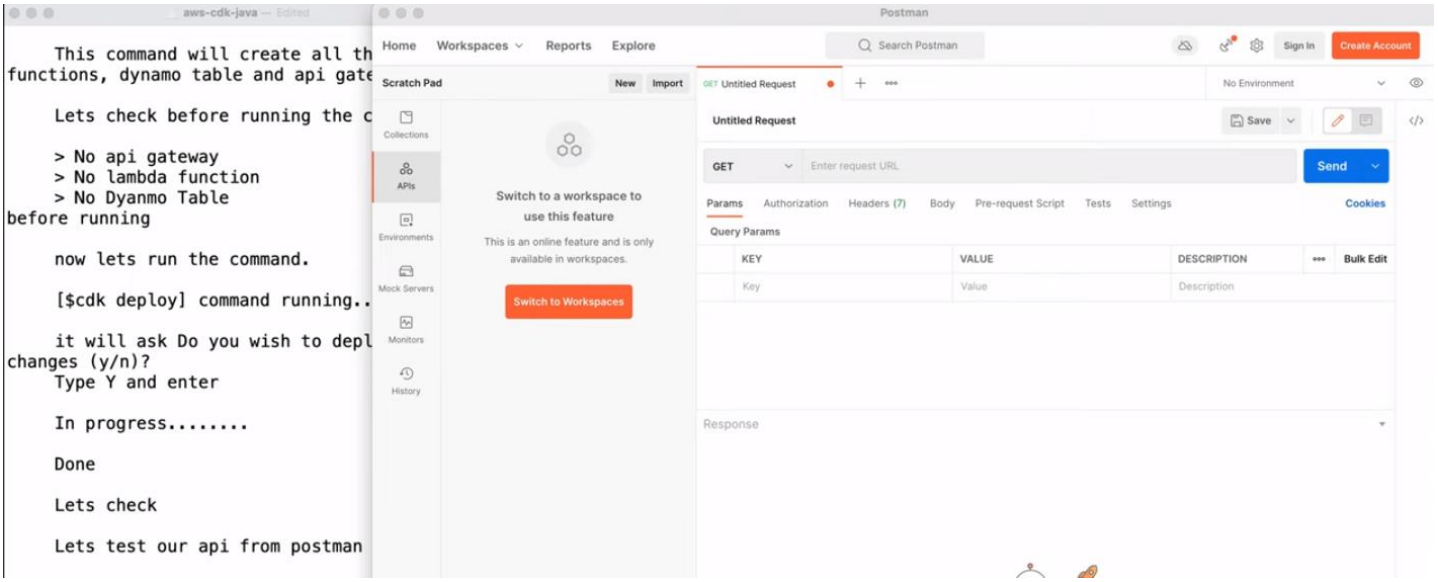
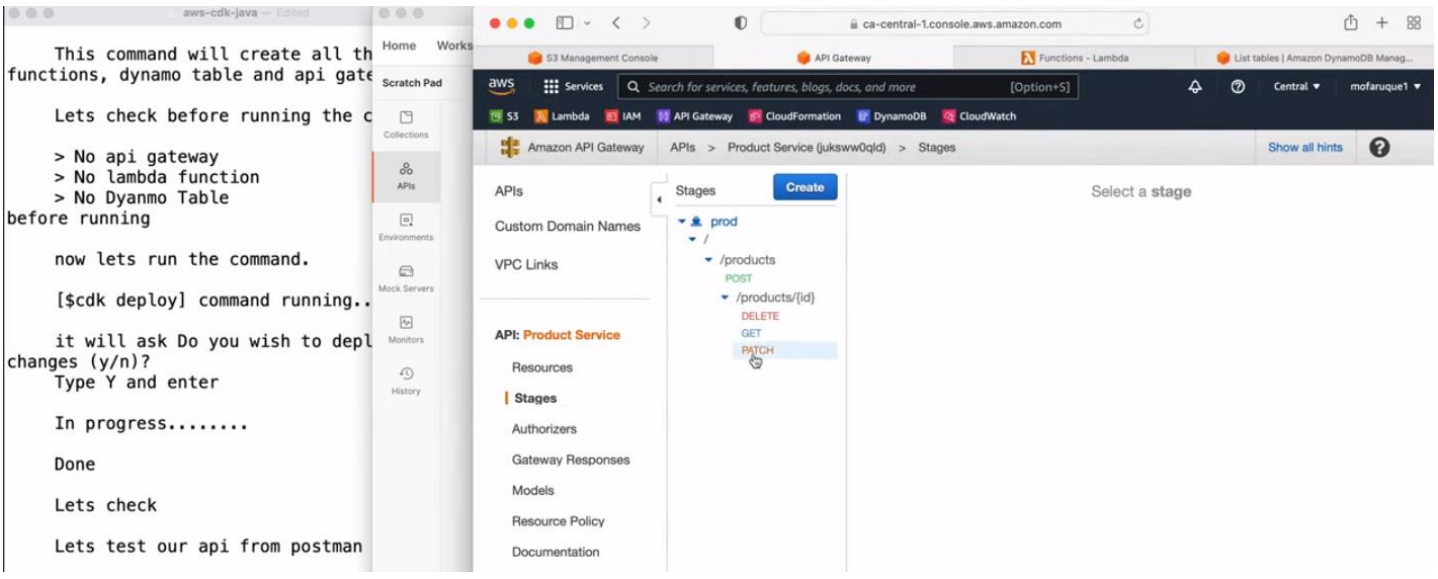
ca-central-1.console.aws.amazon.com
Amazon API Gateway
APIs > Product Service (juksww0qld) > Stages
Show all hints
APIs
Custom Domain Names
VPC Links
API: Product Service
Resources
Stages
Authorizers
Gateway Responses
Models
Resource Policy
Documentation
Stages
Create
prod
Select a stage


aws-cdk-java — Edited
Postman
Home
Workspaces
Reports
Explore
Search Postman
Sign In
Create Account
Scratch Pad
New
Import
Untitled Request
No Environment
Save
GET
Enter request URL
Send
Params
Authorization
Headers (7)
Body
Pre-request Script
Tests
Settings
Cookies
Query Params
KEY
VALUE
DESCRIPTION
Bulk Edit
Switch to a workspace to use this feature
This is an online feature and is only available in workspaces.
Switch to Workspaces
Response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/
/products
POST
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GET
PATCH
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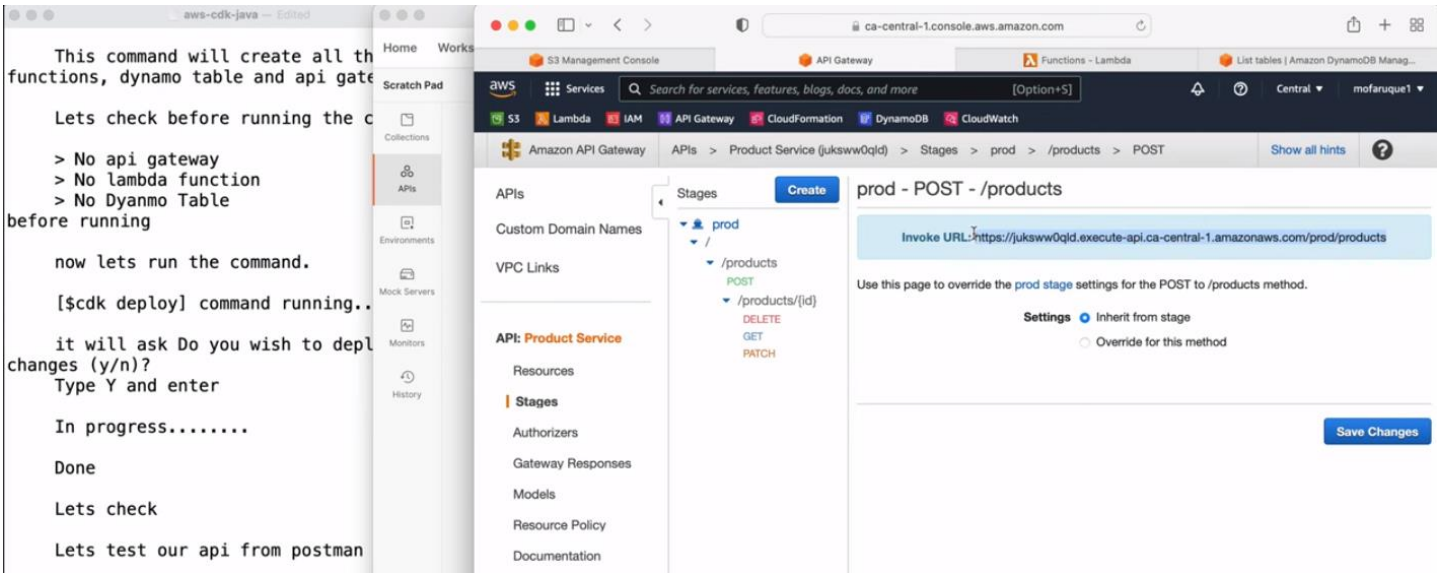
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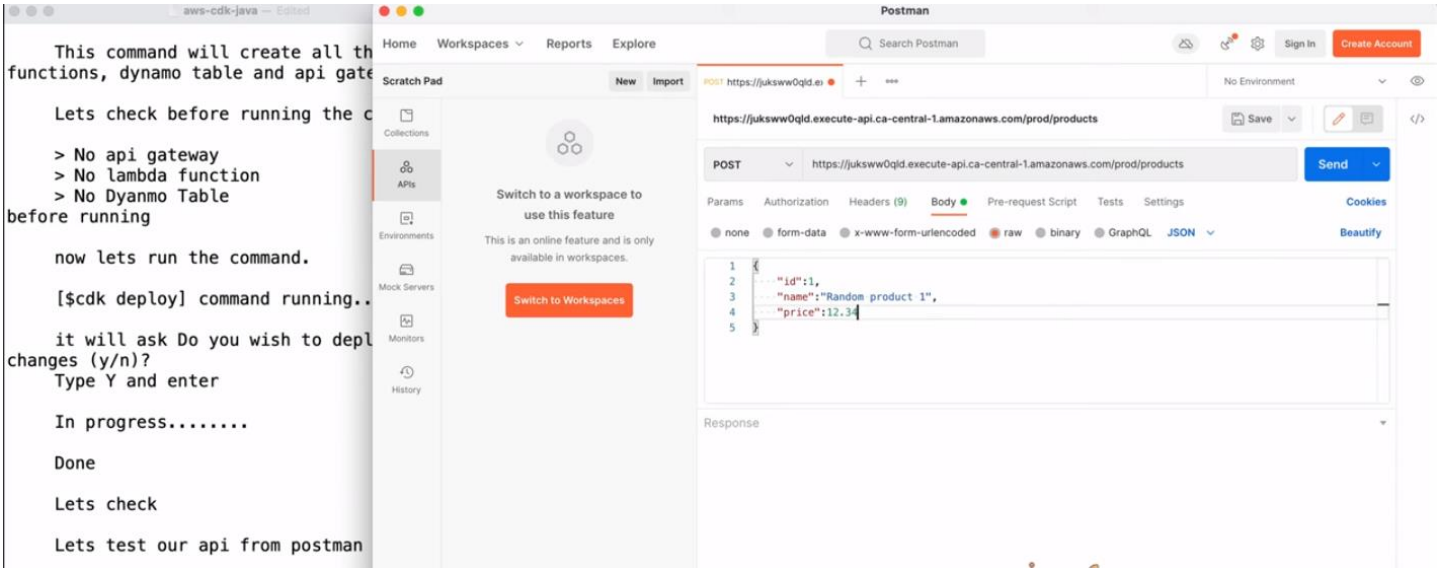
prod
/products
POST
/products/{id}
DELETE
GET
PATCH
prod - POST - /products
Invoke URL: https://jukswww0qld.execute-api.ca-central-1.amazonaws.com/prod/products
Use this page to override the prod stage settings for the POST to /products method.
Settings
Inherit from stage
Override for this method
Save Changes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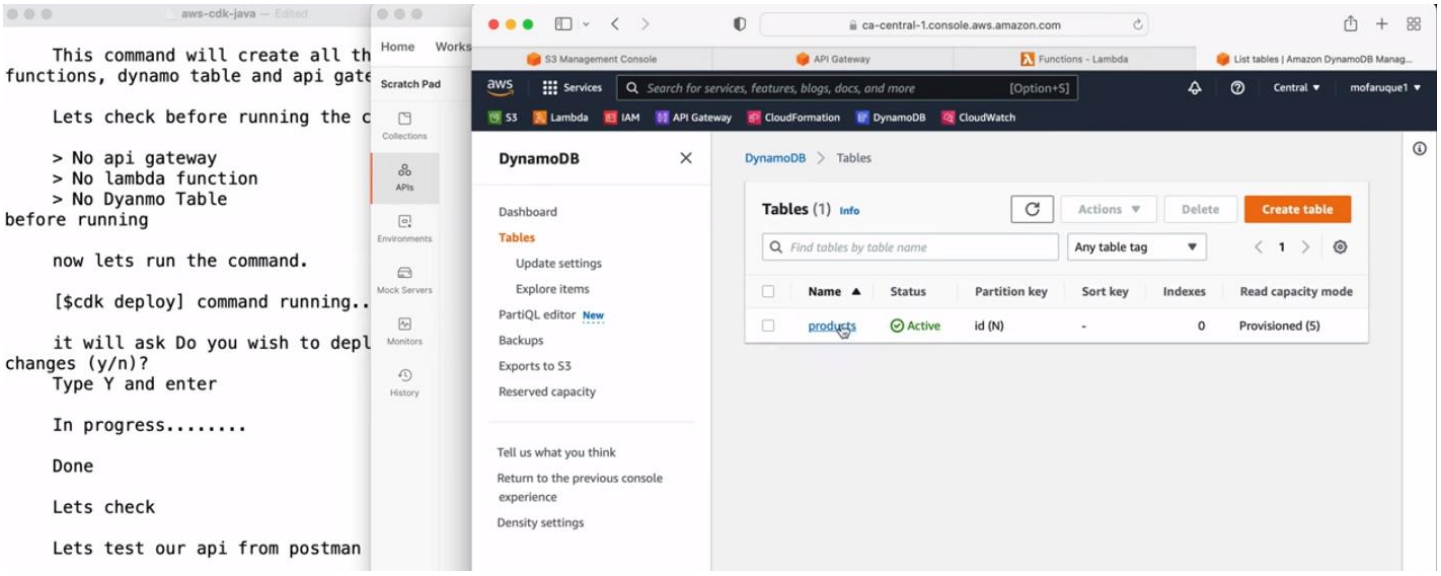
Save
POST
https://jukswww0qld.execute-api.ca-central-1.amazonaws.com/prod/products
Send
Params
Authorization
Headers (9)
Body
Pre-request Script
Tests
Settings
Cookies
none
form-data
x-www-form-urlencoded
raw
binary
GraphQL
JSON
Beautify
{
"id":1,
"name":"Random product 1",
"price":12.34
}
Response
Switch to a workspace to use this feature
This is an online feature and is only available in workspaces.
Switch to Workspaces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DynamoDB
Dashboard
Tables
Update settings
Explore items
PartiQL editor New
Backups
Exports to S3
Reserved capacity
Tell us what you think
Return to the previous console experience
Density settings
DynamoDB > Tables
Tables (1) Info
Actions
Delete
Create table
Find tables by table name
Any table tag
Name
Status
Partition key
Sort key
Indexes
Read capacity mode
products
Active
id (N)
-
0
Provisioned (5)

```
aws-cdk-java — Edited

    This command will create all th
functions, dynamo table and api gate

    Lets check before running the c

    > No api gateway
    > No lambda function
    > No Dyanmo Table
before running

    now lets run the command.

    [$cdk deploy] command running..

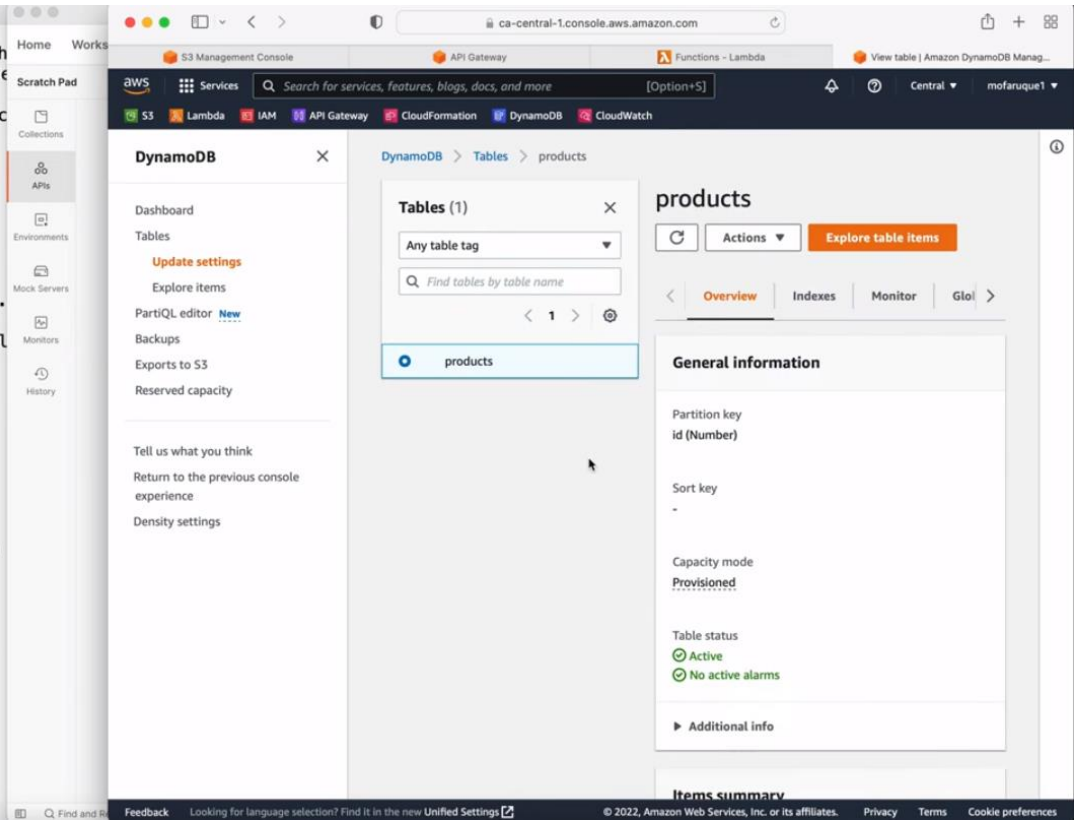
    it will ask Do you wish to depl
changes (y/n)?
    Type Y and enter

    In progress........

    Done

    Lets check

    Lets test our api from postman
```




```
aws-cdk-java — Edited

    This command will create all the
functions, dynamo table and api gateway

    Lets check before running the command

    > No api gateway
    > No lambda function
    > No Dyanmo Table
before running

    now lets run the command.

    [$cdk deploy] command running...

    it will ask Do you wish to deploy these
changes (y/n)?
    Type Y and enter

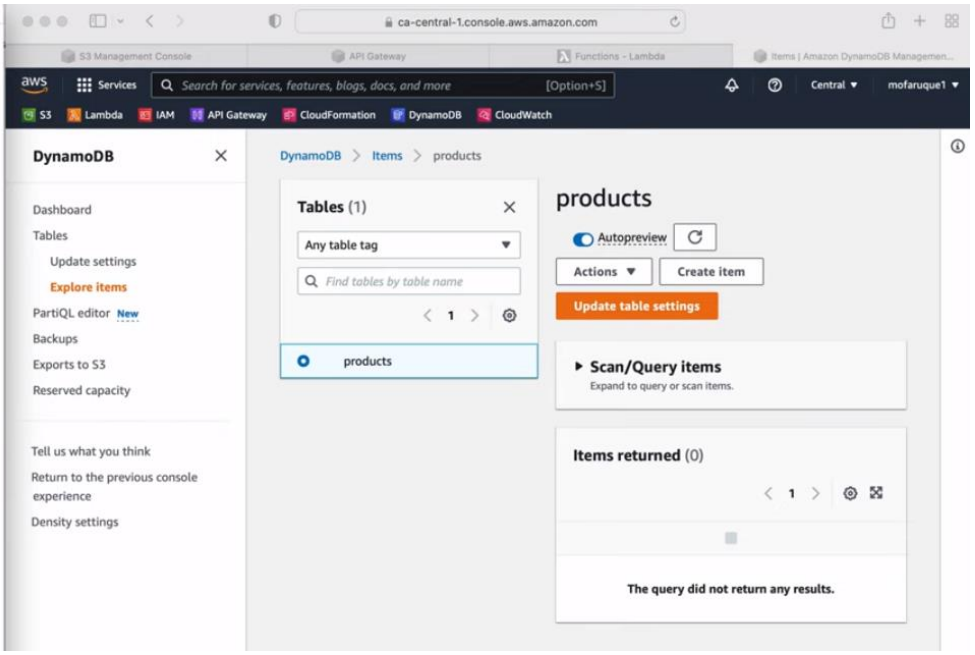
    In progress........

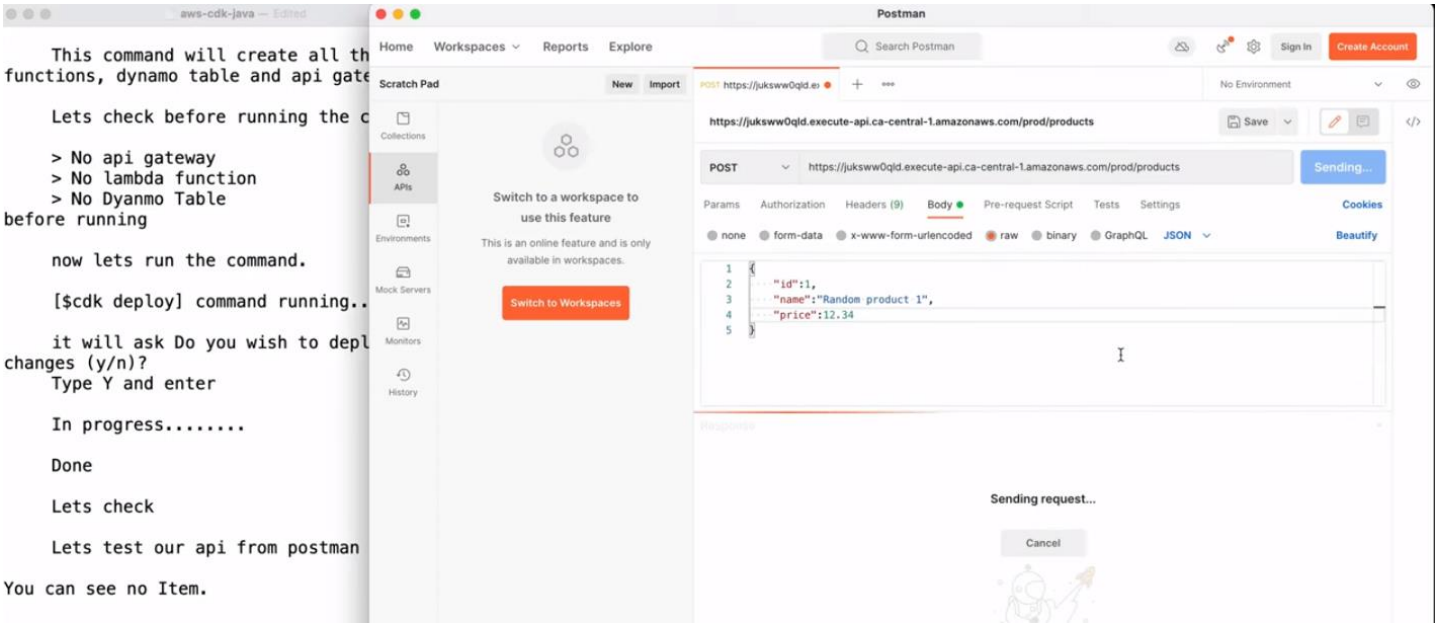
    Done

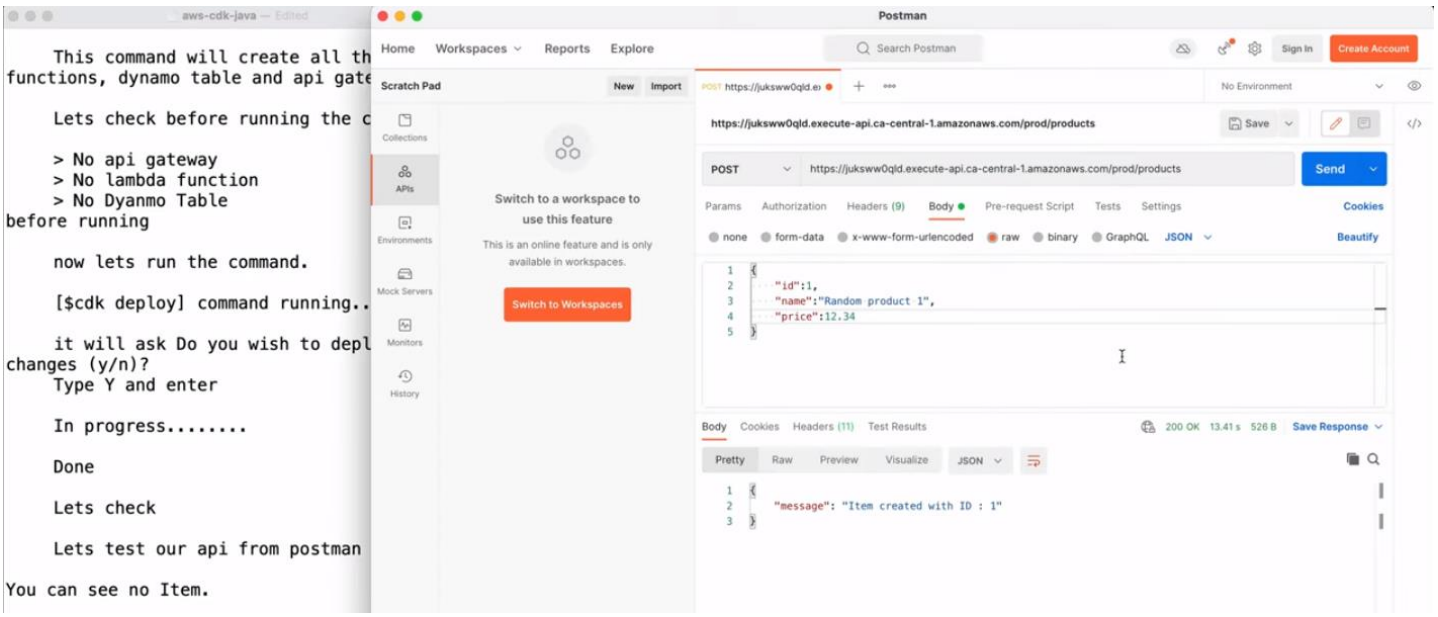
    Lets check

    Lets test our api from postman

You can see no Item.
```




aws-cdk-java — Edited
This command will create all th
functions, dynamo table and api gate
Lets check before running the c
> No api gateway
> No lambda function
> No Dyanmo Table
before running
now lets run the command.
[$cdk deploy] command running..
it will ask Do you wish to depl
changes (y/n)?
Type Y and enter
In progress.....
Done
Lets check
Lets test our api from postman
You can see no Item.
Postman
Home
Workspaces
Reports
Explore
Search Postman
Sign In
Create Account
Scratch Pad
New
Import
No Environment
https://juksww0qld.execute-api.ca-central-1.amazonaws.com/prod/products
Save
POST
https://juksww0qld.execute-api.ca-central-1.amazonaws.com/prod/products
Sending...
Params
Authorization
Headers (9)
Body
Pre-request Script
Tests
Settings
Cookies
none
form-data
x-www-form-urlencoded
raw
binary
GraphQL
JSON
Beautify
{
"id":1,
"name":"Random product 1",
"price":12.34
}
Collections
APIs
Environments
Mock Servers
Monitors
History
Switch to a workspace to use this feature
This is an online feature and is only available in workspaces.
Switch to Workspaces
Sending request...
Cancel


aws-cdk-java — Edited
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Lets check before running the c
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> No lambda function
> No Dyanmo Table
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now lets run the command.
[$cdk deploy] command running..
it will ask Do you wish to depl
changes (y/n)?
Type Y and enter
In progress.....
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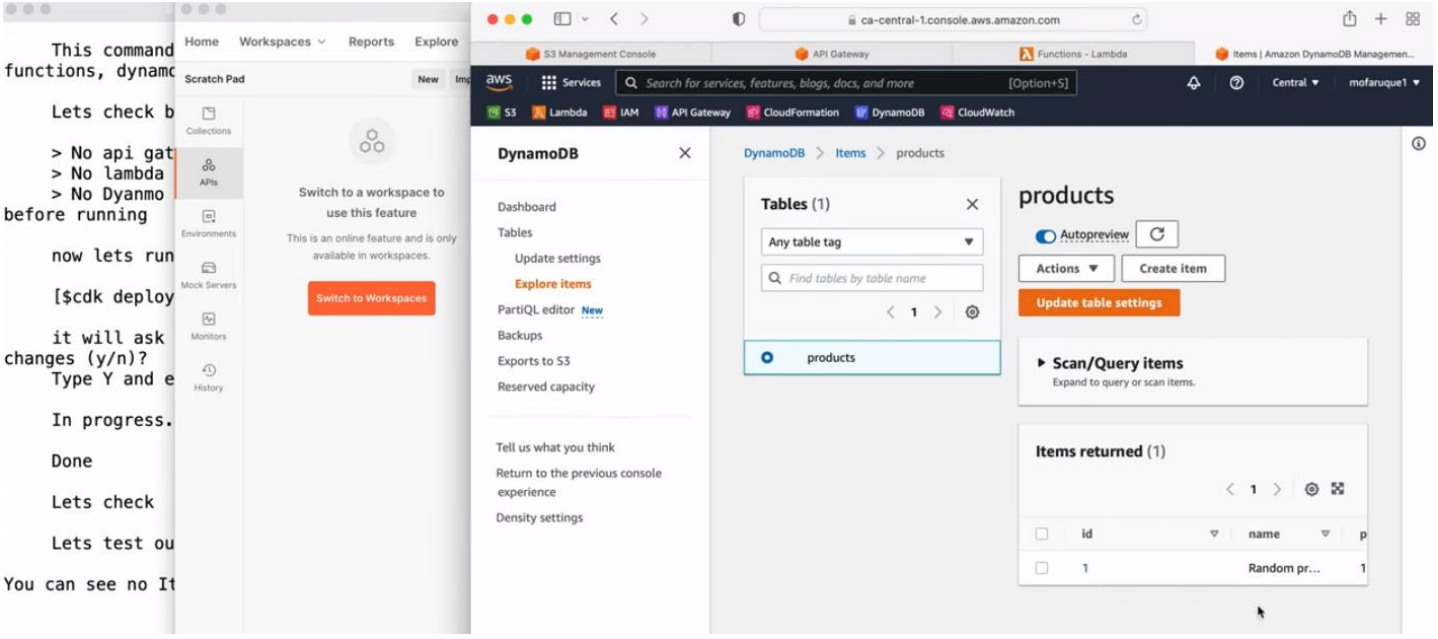
Save
POST
https://juksww0qld.execute-api.ca-central-1.amazonaws.com/prod/products
Send
Params
Authorization
Headers (9)
Body
Pre-request Script
Tests
Settings
Cookies
none
form-data
x-www-form-urlencoded
raw
binary
GraphQL
JSON
Beautify
{
"id":1,
"name":"Random product 1",
"price":12.34
}
Body
Cookies
Headers (11)
Test Results
200 OK
13.41 s
526 B
Save Response
Pretty
Raw
Preview
Visualize
JSON
{
"message": "Item created with ID : 1"
}
Collections
APIs
Environments
Mock Servers
Monitors
History
Switch to a workspace to use this feature
This is an online feature and is only available in workspaces.
Switch to Workspaces


This command
functions, dynamo
Lets check b
> No api gat
> No lambda
> No Dyanmo
before running
now lets run
[$cdk deploy
it will ask
changes (y/n)?
Type Y and e
In progress.
Done
Lets check
Lets test ou
You can see no It
Home
Workspaces
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Scratch Pad
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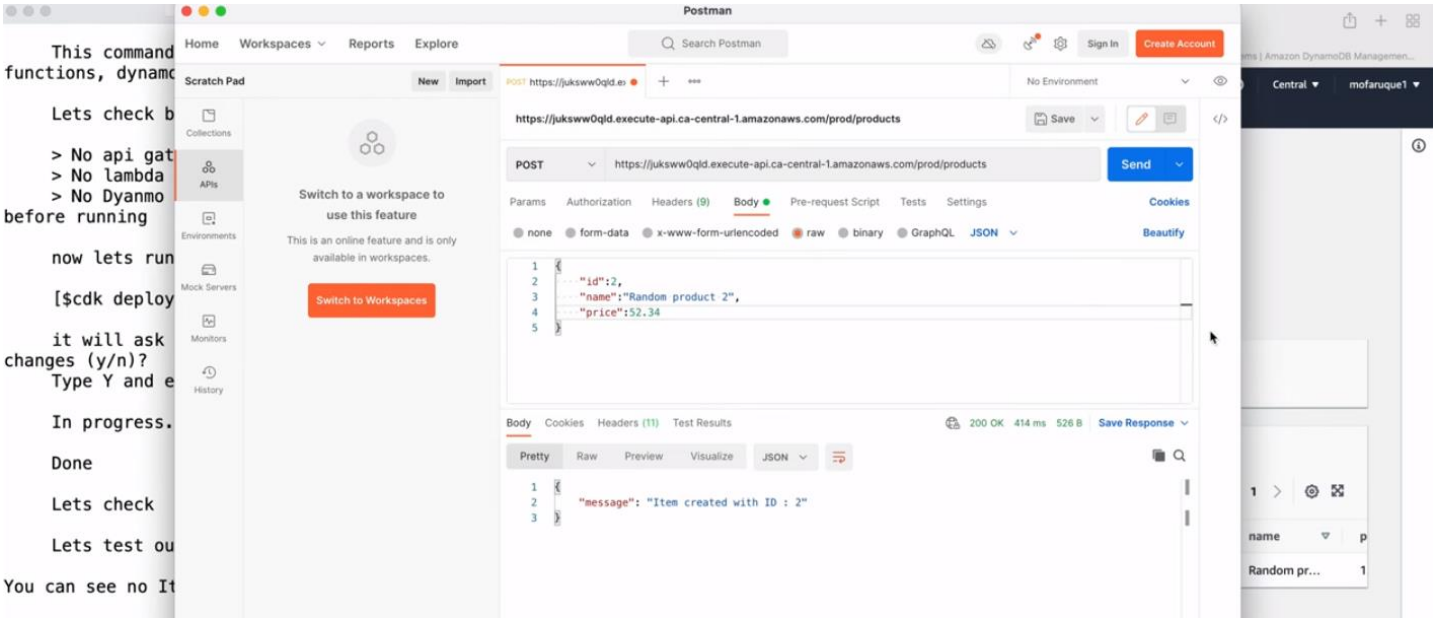
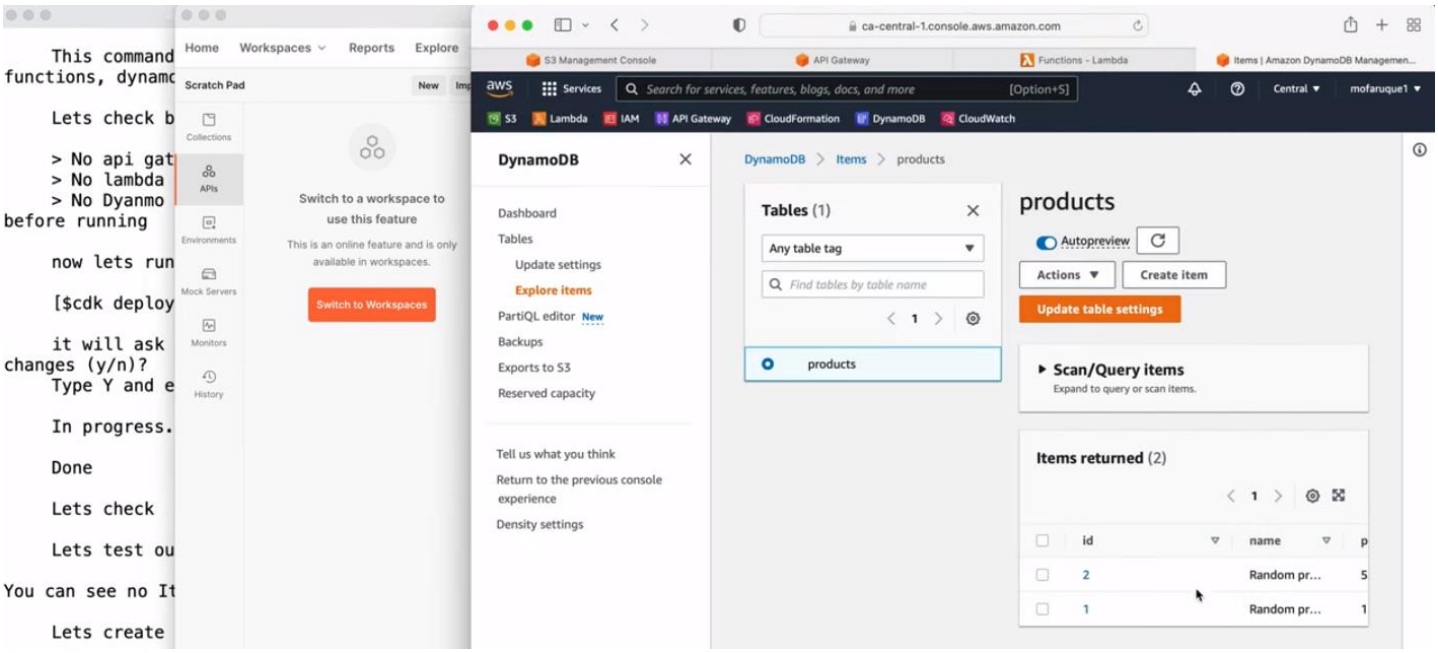
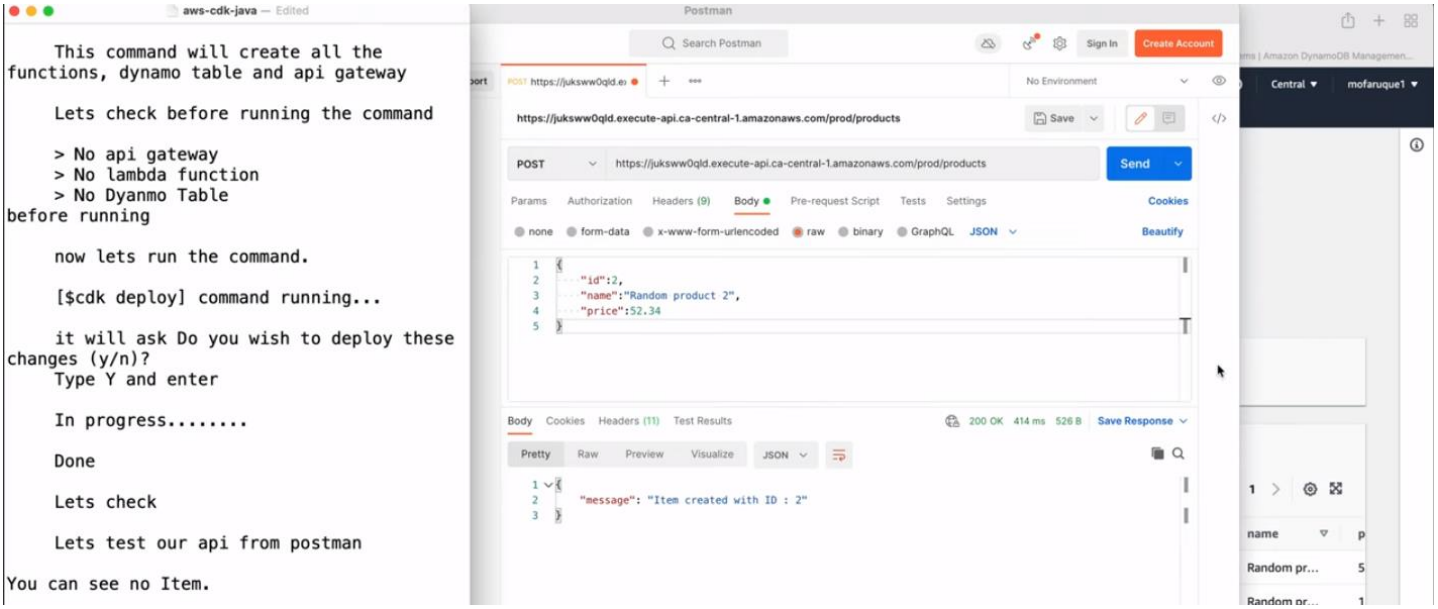
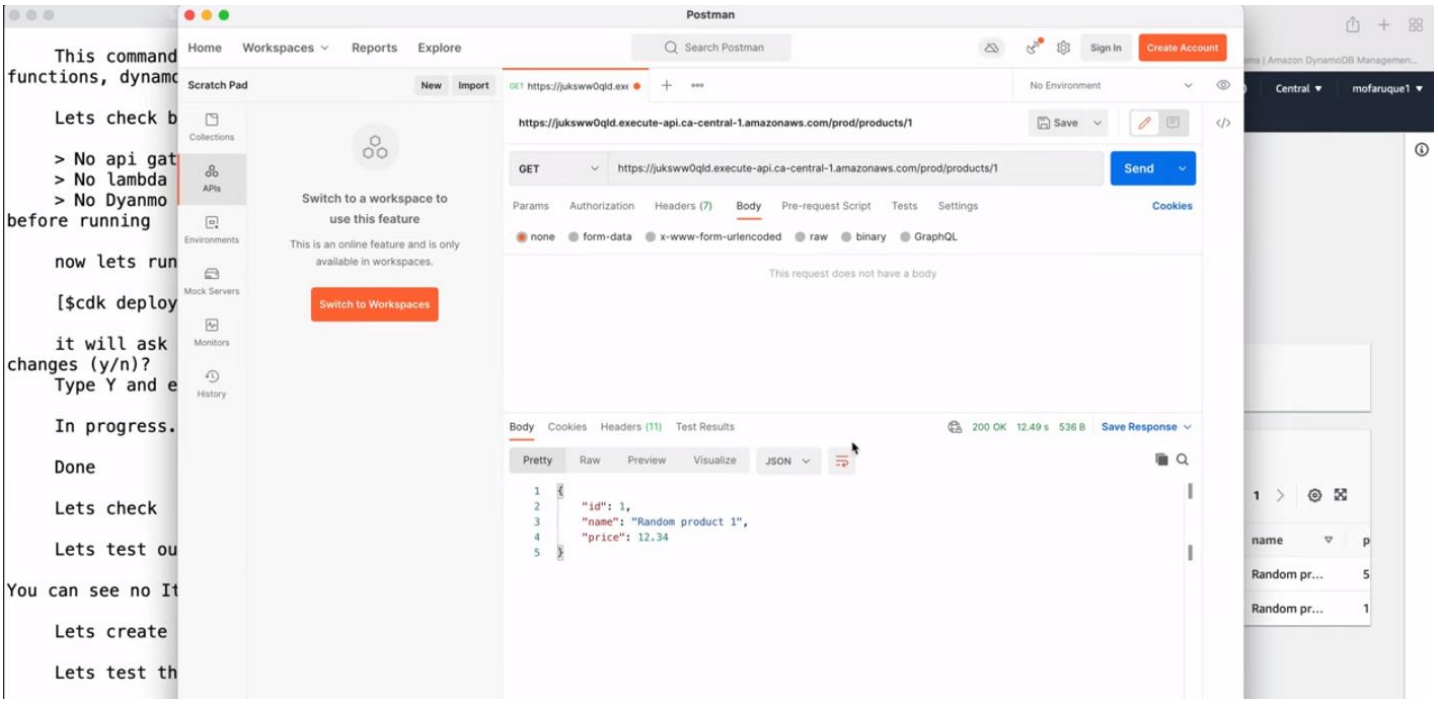
Switch to Workspaces
ca-central-1.console.aws.amazon.com
S3 Management Console
API Gateway
Functions - Lambda
Items | Amazon DynamoDB Managemen...
aws
Services
Search for services, features, blogs, docs, and more
[Option+S]
Central
mofaruque1
S3
Lambda
IAM
API Gateway
CloudFormation
DynamoDB
CloudWatch
DynamoDB
Dashboard
Tables
Update settings
Explore items
PartiQL editor New
Backups
Exports to S3
Reserved capacity
Tell us what you think
Return to the previous console experience
Density settings
DynamoDB > Items > products
Tables (1)
Any table tag
Find tables by table name
products
products
Autopreview
Actions
Create item
Update table settings
Scan/Query items
Expand to query or scan items.
Items returned (1)
id
name
1
Random pr...


This command
functions, dynamo
Lets check b
> No api gat
> No lambda
> No Dyanmo
before running
now lets run
[$cdk deploy
it will ask
changes (y/n)?
Type Y and e
In progress.
Done
Lets check
Lets test ou
You can see no It
Postman
Home
Workspaces
Reports
Explore
Search Postman
Sign In
Create Account
Scratch Pad
New
Import
Switch to a workspace to use this feature
This is an online feature and is only available in workspaces.
Switch to Workspaces
https://jukswww0qld.execute-api.ca-central-1.amazonaws.com/prod/products
POST
Send
Params
Authorization
Headers (9)
Body
Pre-request Script
Tests
Settings
Cookies
Beautify
{
"id":2,
"name":"Random product 2",
"price":52.34
}
Body
Cookies
Headers (11)
Test Results
200 OK
414 ms
526 B
Save Response
Pretty
Raw
Preview
Visualize
JSON
{
"message": "Item created with ID : 2"
}
Central
mofaruque1
name
Random pr...


This command
functions, dynamo
Lets check b
> No api gat
> No lambda
> No Dyanmo
before running
now lets run
[$cdk deploy
it will ask
changes (y/n)?
Type Y and e
In progress.
Done
Lets check
Lets test ou
You can see no It
Lets create
ca-central-1.console.aws.amazon.com
S3 Management Console
API Gateway
Functions - Lambda
Items | Amazon DynamoDB Managemen...
Services
Search for services, features, blogs, docs, and more
[Option+S]
Central
mofaruque1
S3
Lambda
IAM
API Gateway
CloudFormation
DynamoDB
CloudWatch
DynamoDB
Dashboard
Tables
Update settings
Explore items
PartiQL editor New
Backups
Exports to S3
Reserved capacity
Tell us what you think
Return to the previous console experience
Density settings
DynamoDB > Items > products
Tables (1)
Any table tag
Find tables by table name
products
Autopreview
Actions
Create item
Update table settings
Scan/Query items
Expand to query or scan items.
Items returned (2)
id
name
2
Random pr...
1
Random pr...


aws-cdk-java — Edited
This command will create all the
functions, dynamo table and api gateway
Lets check before running the command
> No api gateway
> No lambda function
> No Dyanmo Table
before running
now lets run the command.
[$cdk deploy] command running...
it will ask Do you wish to deploy these
changes (y/n)?
Type Y and enter
In progress.....
Done
Lets check
Lets test our api from postman
You can see no Item.
Postman
Search Postman
Sign In
Create Account
https://jukswww0qld.execute-api.ca-central-1.amazonaws.com/prod/products
POST
Send
Params
Authorization
Headers (9)
Body
Pre-request Script
Tests
Settings
Cookies
Beautify
{
"id":2,
"name":"Random product 2",
"price":52.34
}
Body
Cookies
Headers (11)
Test Results
200 OK
414 ms
526 B
Save Response
Pretty
Raw
Preview
Visualize
JSON
{
"message": "Item created with ID : 2"
}
Central
mofaruque1
name
Random pr...


This command
functions, dynamo
Lets check b
> No api gat
> No lambda
> No Dyanmo
before running
now lets run
[$cdk deploy
it will ask
changes (y/n)?
Type Y and e
In progress.
Done
Lets check
Lets test ou
You can see no It
Lets create
Lets test th
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New
Import
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Monitors
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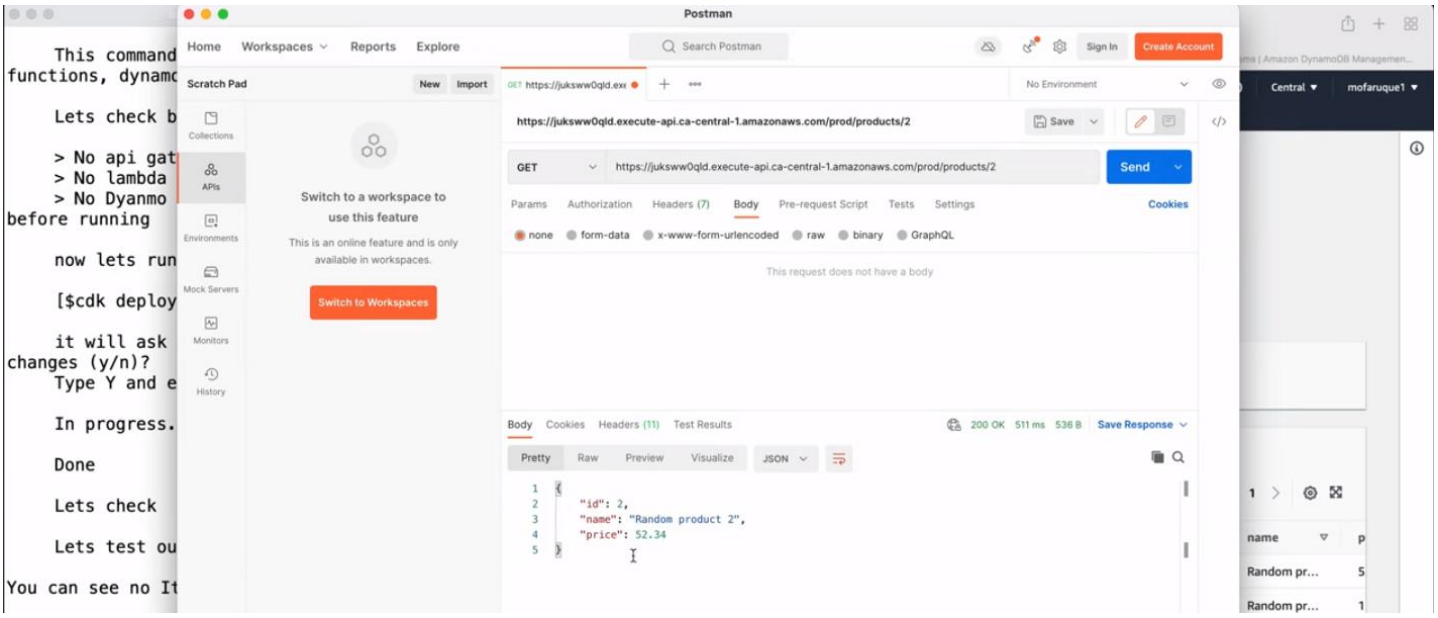
Switch to a workspace to use this feature
This is an online feature and is only available in workspaces.
Switch to Workspaces
No Environment
https://jukswww0qld.execute-api.ca-central-1.amazonaws.com/prod/products/1
Save
GET
Send
Params
Authorization
Headers (7)
Body
Pre-request Script
Tests
Settings
Cookies
none
form-data
x-www-form-urlencoded
raw
binary
GraphQL
This request does not have a body
Body
Cookies
Headers (11)
Test Results
200 OK
12.49 s
536 B
Save Response
Pretty
Raw
Preview
Visualize
JSON
{
"id": 1,
"name": "Random product 1",
"price": 12.34
}
Central
mofaruque1
name
Random pr...
5
Random pr...
1


This command
functions, dynamo
Lets check b
> No api gat
> No lambda
> No Dyanmo
before running
now lets run
[$cdk deploy
it will ask
changes (y/n)?
Type Y and e
In progress.
Done
Lets check
Lets test ou
You can see no It
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New
Import
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Mock Servers
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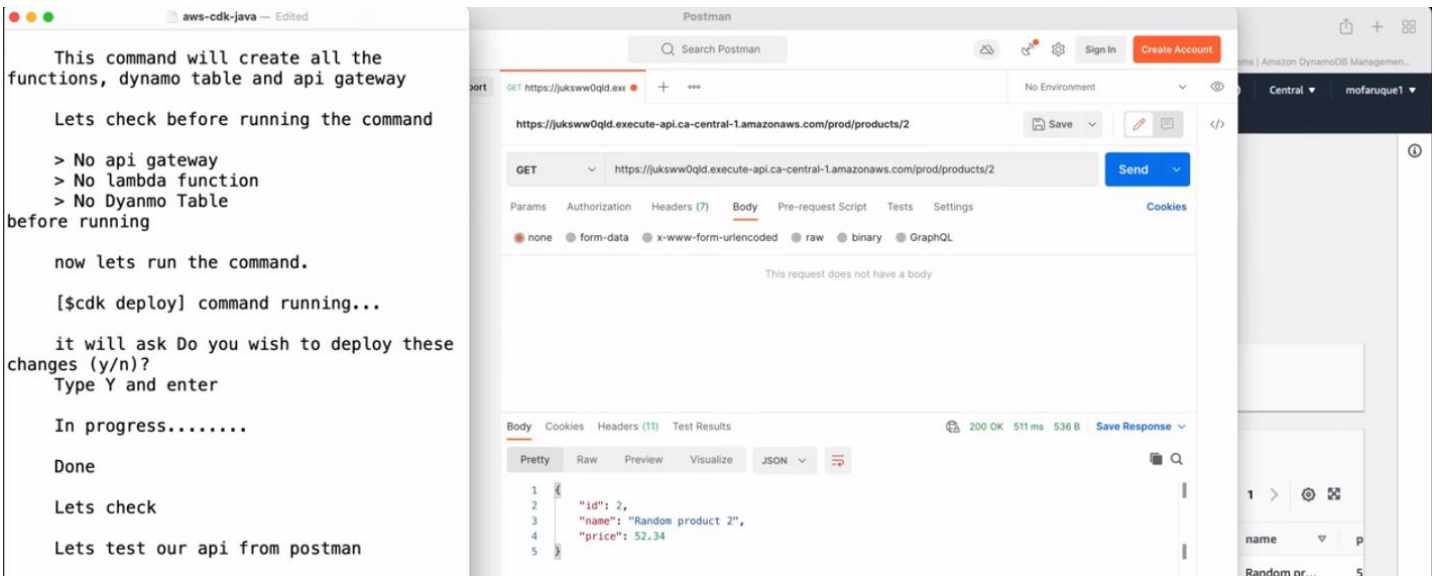
History
Switch to a workspace to use this feature
This is an online feature and is only available in workspaces.
Switch to Workspaces
No Environment
https://jukswww0qld.execute-api.ca-central-1.amazonaws.com/prod/products/2
Save
GET
Send
Params
Authorization
Headers (7)
Body
Pre-request Script
Tests
Settings
Cookies
none
form-data
x-www-form-urlencoded
raw
binary
GraphQL
This request does not have a body
Body
Cookies
Headers (11)
Test Results
200 OK
511 ms
536 B
Save Response
Pretty
Raw
Preview
Visualize
JSON
{
"id": 2,
"name": "Random product 2",
"price": 52.34
}
Central
mofaruque1
name
Random pr...
5
Random pr...
1


aws-cdk-java — Edited
This command will create all the
functions, dynamo table and api gateway
Lets check before running the command
> No api gateway
> No lambda function
> No Dyanmo Table
before running
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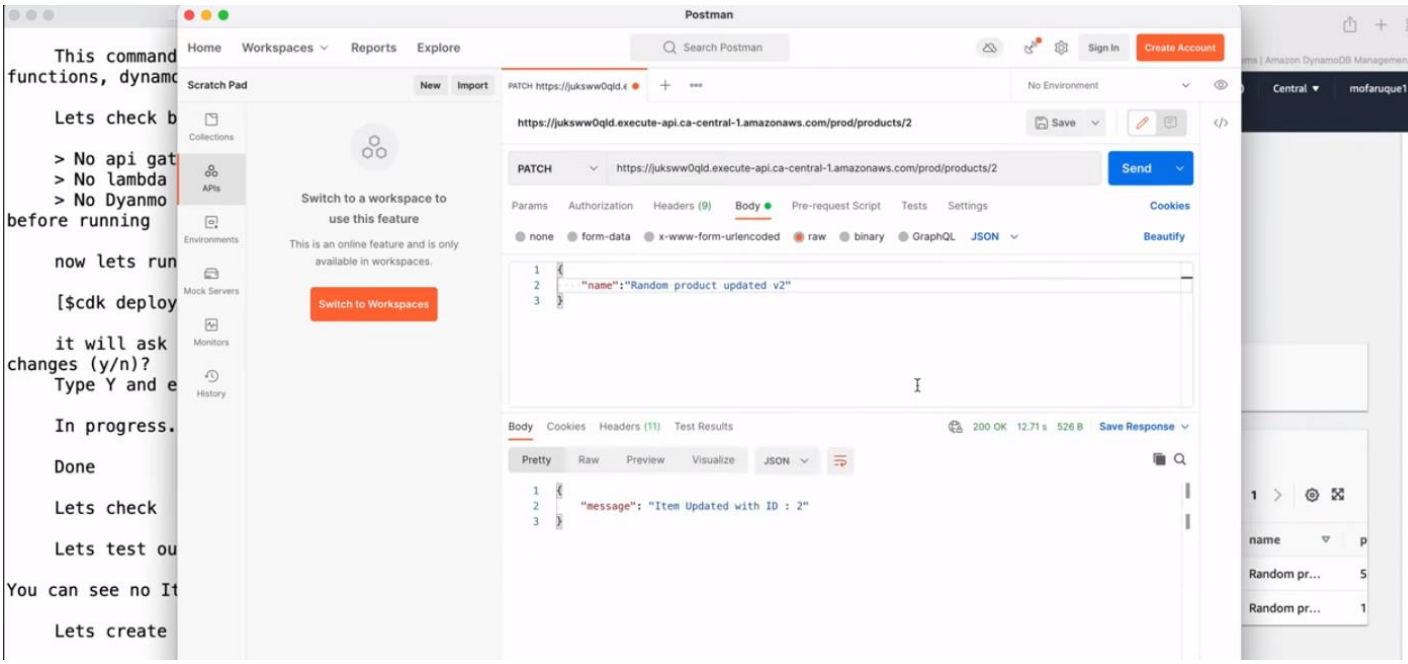
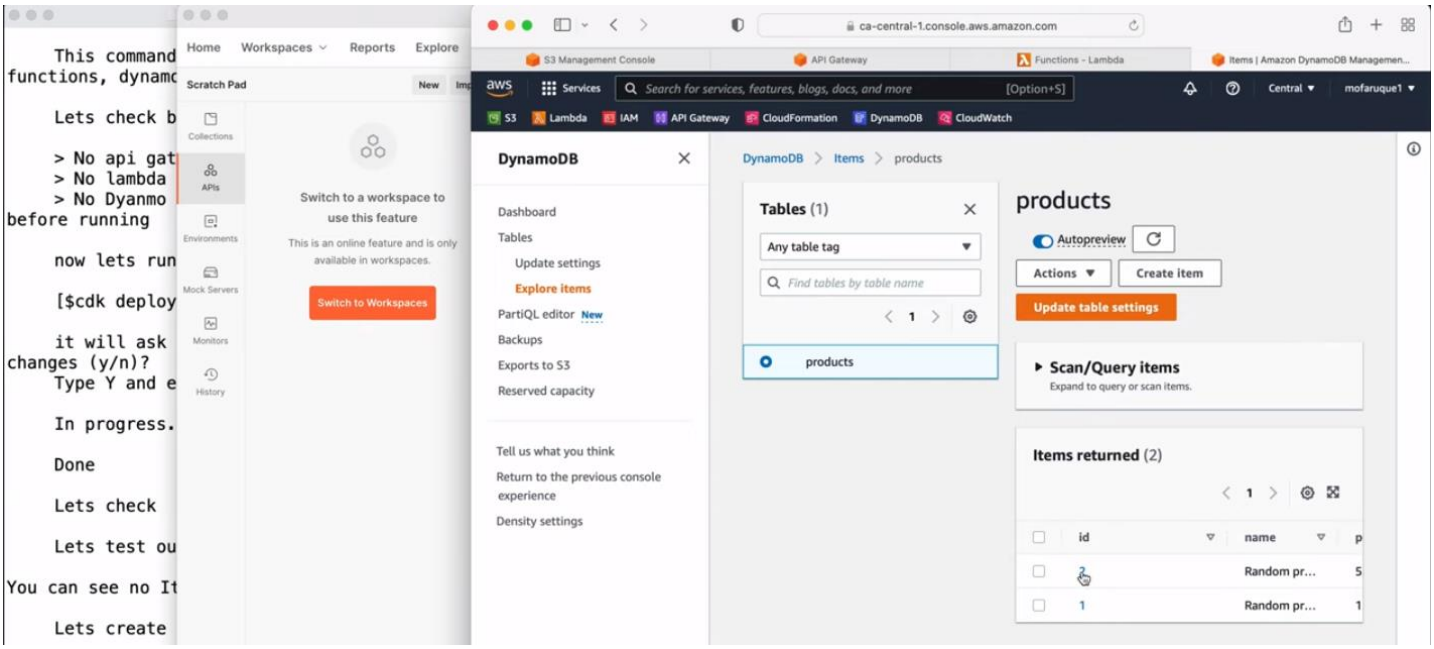
[$cdk deploy] command running...
it will ask Do you wish to deploy these
changes (y/n)?
Type Y and enter
In progress.....
Done
Lets check
Lets test our api from postman
Postman
Search Postman
Sign In
Create Account
No Environment
https://jukswww0qld.execute-api.ca-central-1.amazonaws.com/prod/products/2
Save
GET
Send
Params
Authorization
Headers (7)
Body
Pre-request Script
Tests
Settings
Cookies
none
form-data
x-www-form-urlencoded
raw
binary
GraphQL
This request does not have a body
Body
Cookies
Headers (11)
Test Results
200 OK
511 ms
536 B
Save Response
Pretty
Raw
Preview
Visualize
JSON
{
"id": 2,
"name": "Random product 2",
"price": 52.34
}
Central
mofaruque1
name


This command
functions, dynamo
Lets check b
> No api gat
> No lambda
> No Dyanmo
before running
now lets run
[$cdk deploy
it will ask
changes (y/n)?
Type Y and e
In progress.
Done
Lets check
Lets test ou
You can see no It
Lets create
Postman
Home
Workspaces
Reports
Explore
Search Postman
Sign In
Create Account
Scratch Pad
New
Import
PATCH https://juksww0qld.e
No Environment
https://juksww0qld.execute-api.ca-central-1.amazonaws.com/prod/products/2
Save
PATCH
https://juksww0qld.execute-api.ca-central-1.amazonaws.com/prod/products/2
Send
Params
Authorization
Headers (9)
Body
Pre-request Script
Tests
Settings
Cookies
none
form-data
x-www-form-urlencoded
raw
binary
GraphQL
JSON
Beautify
{
"name":"Random product updated v2"
}
Collections
APIs
Environments
Mock Servers
Monitors
History
Switch to a workspace to use this feature
This is an online feature and is only available in workspaces.
Switch to Workspaces
Body
Cookies
Headers (11)
Test Results
200 OK
12.71 s
526 B
Save Response
Pretty
Raw
Preview
Visualize
JSON
{
"message": "Item Updated with ID : 2"
}
Central
mofaruque1
name
Random pr...
5
Random pr...
1


This command
functions, dynamo
Lets check b
> No api gat
> No lambda
> No Dyanmo
before running
now lets run
[$cdk deploy
it will ask
changes (y/n)?
Type Y and e
In progress.
Done
Lets check
Lets test ou
You can see no It
Lets create
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API Gateway
Functions - Lambda
Items | Amazon DynamoDB Managemen...
Services
Search for services, features, blogs, docs, and more
[Option+S]
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mofaruque1
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API Gateway
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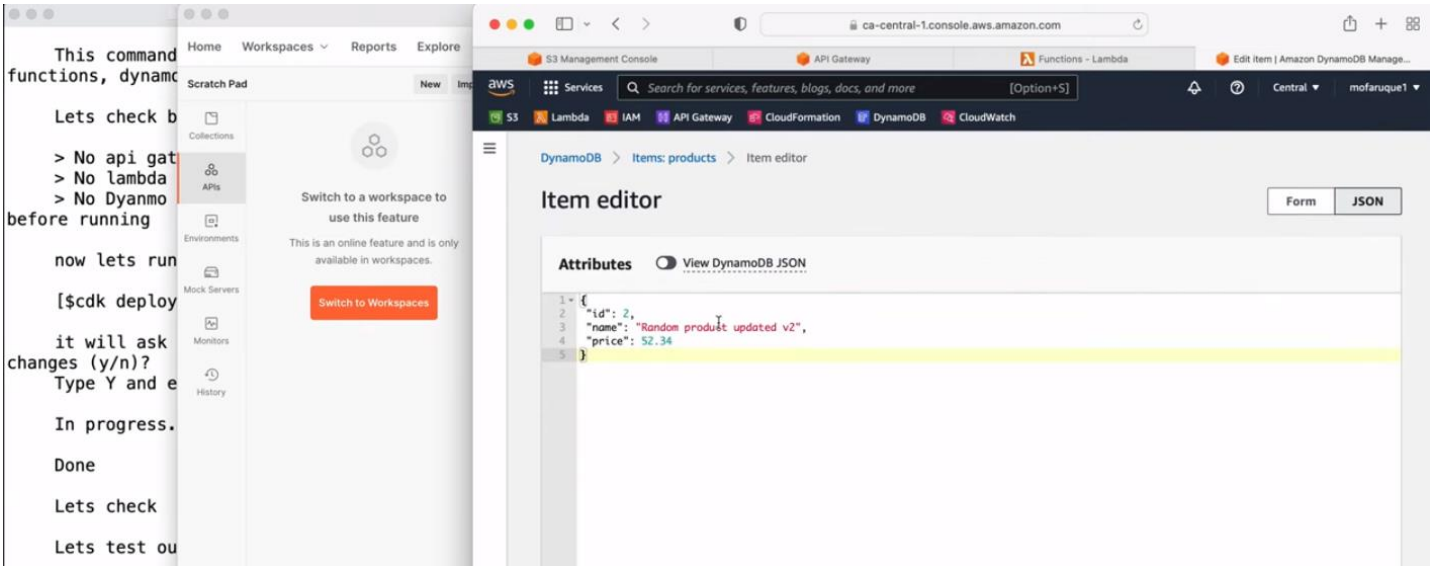
Tell us what you think
Return to the previous console experience
Density settings
DynamoDB > Items > products
Tables (1)
Any table tag
Find tables by table name
products
products
Autopreview
Actions
Create item
Update table settings
Scan/Query items
Expand to query or scan items.
Items returned (2)
id
name
2
Random pr...
5
1
Random pr...
1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Lets check b
> No api gat
> No lambda
> No Dyanmo
before running
now lets run
[$cdk deploy
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changes (y/n)?
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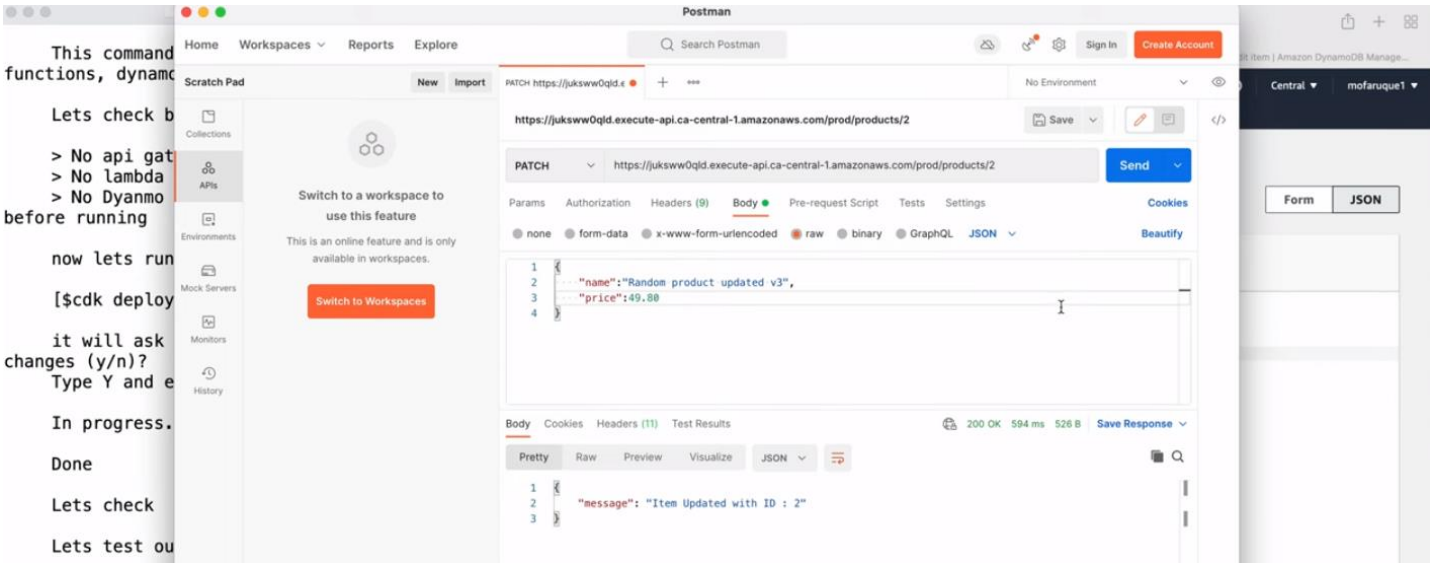
ca-central-1.console.aws.amazon.com
S3 Management Console
API Gateway
Functions - Lambda
Edit item | Amazon DynamoDB Manage...
Services
Search for services, features, blogs, docs, and more
[Option+S]
Central
mofaruque1
S3
Lambda
IAM
API Gateway
CloudFormation
DynamoDB
CloudWatch
DynamoDB > Items: products > Item editor
Item editor
Form
JSON
Attributes
View DynamoDB JSON
{
"id": 2,
"name": "Random product updated v2",
"price": 52.34
}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functions, dynamo
Lets check b
> No api gat
> No lambda
> No Dyanmo
before running
now lets run
[$cdk deploy
it will ask
changes (y/n)?
Type Y and e
In progress.
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Lets test ou
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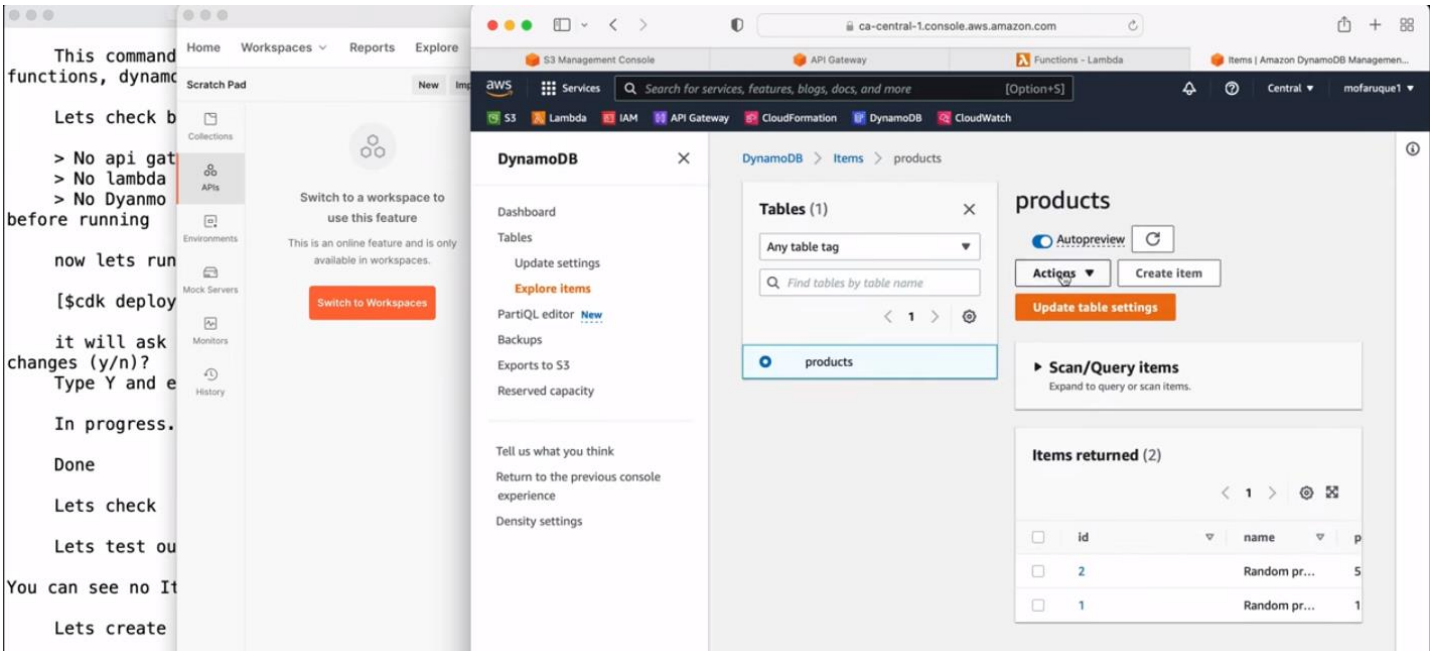
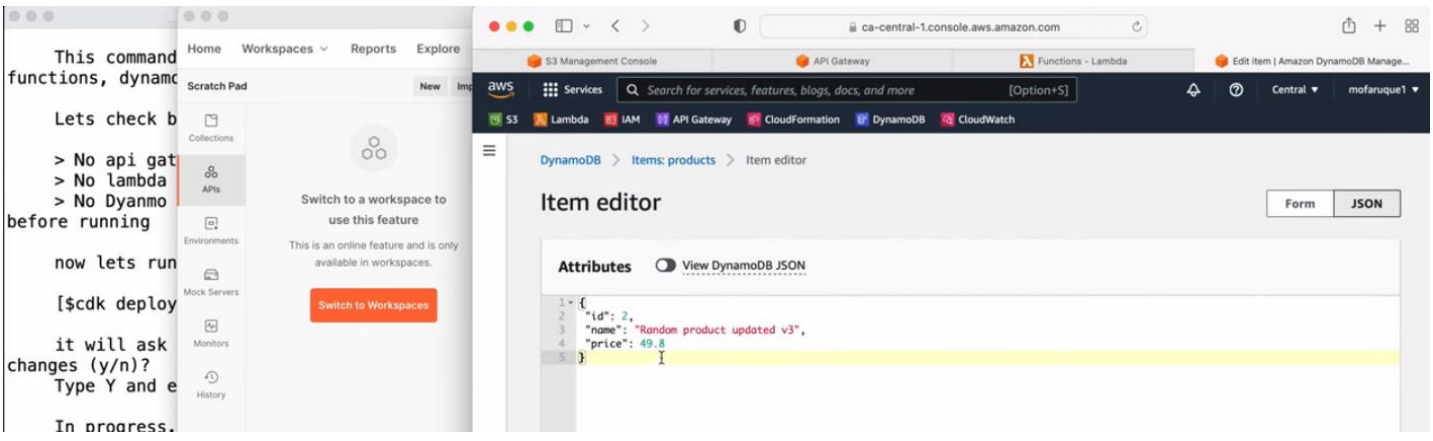
Search Postman
Sign In
Create Account
Scratch Pad
New
Import
No Environment
Switch to a workspace to use this feature
This is an online feature and is only available in workspaces.
Switch to Workspaces
https://jukswww0qld.execute-api.ca-central-1.amazonaws.com/prod/products/2
Save
PATCH
https://jukswww0qld.execute-api.ca-central-1.amazonaws.com/prod/products/2
Send
Params
Authorization
Headers (9)
Body
Pre-request Script
Tests
Settings
Cookies
none
form-data
x-www-form-urlencoded
raw
binary
GraphQL
JSON
Beautify
{
"name":"Random product updated v3",
"price":49.80
}
Body
Cookies
Headers (11)
Test Results
200 OK
594 ms
526 B
Save Response
Pretty
Raw
Preview
Visualize
JSON
{
"message": "Item Updated with ID : 2"
}
Central
mofaruque1
Form
JSON


This command
functions, dynamo
Lets check b
> No api gat
> No lambda
> No Dyanmo
before running
now lets run
[$cdk deploy
it will ask
changes (y/n)?
Type Y and e
In progress.
Done
Lets check
Lets test ou
You can see no It
Lets create
ca-central-1.console.aws.amazon.com
S3 Management Console
API Gateway
Functions - Lambda
Items | Amazon DynamoDB Managemen...
Services
Search for services, features, blogs, docs, and more
[Option+S]
Central
mofaruque1
S3
Lambda
IAM
API Gateway
CloudFormation
DynamoDB
CloudWatch
DynamoDB
Dashboard
Tables
Update settings
Explore items
PartiQL editor New
Backups
Exports to S3
Reserved capacity
Tell us what you think
Return to the previous console experience
Density settings
DynamoDB > Items > products
Tables (1)
Any table tag
Find tables by table name
products
products
Autopreview
Actions
Create item
Update table settings
Scan/Query items
Expand to query or scan items.
Items returned (2)
id
name
2
Random pr...
1
Random pr...


This command
functions, dynamo
Lets check b
> No api gat
> No lambda
> No Dyanmo
before running
now lets run
[$cdk deploy
it will ask
changes (y/n)?
Type Y and e
In progress.
ca-central-1.console.aws.amazon.com
S3 Management Console
API Gateway
Functions - Lambda
Edit item | Amazon DynamoDB Manage...
Services
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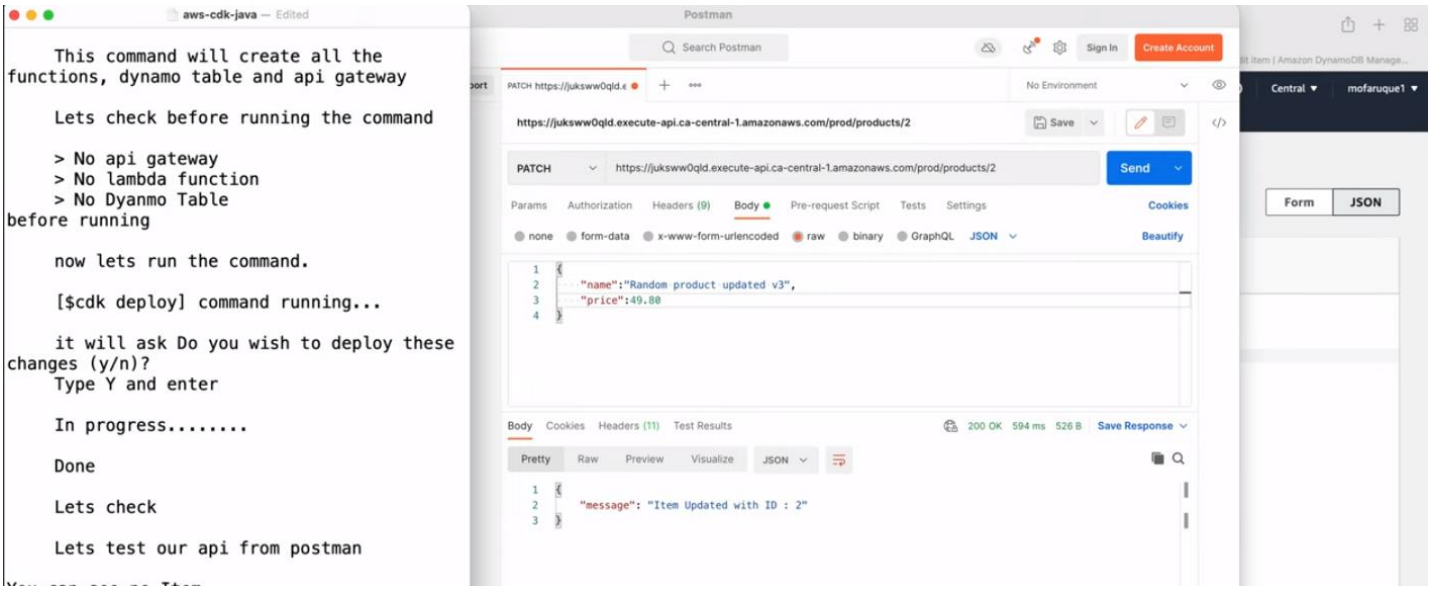
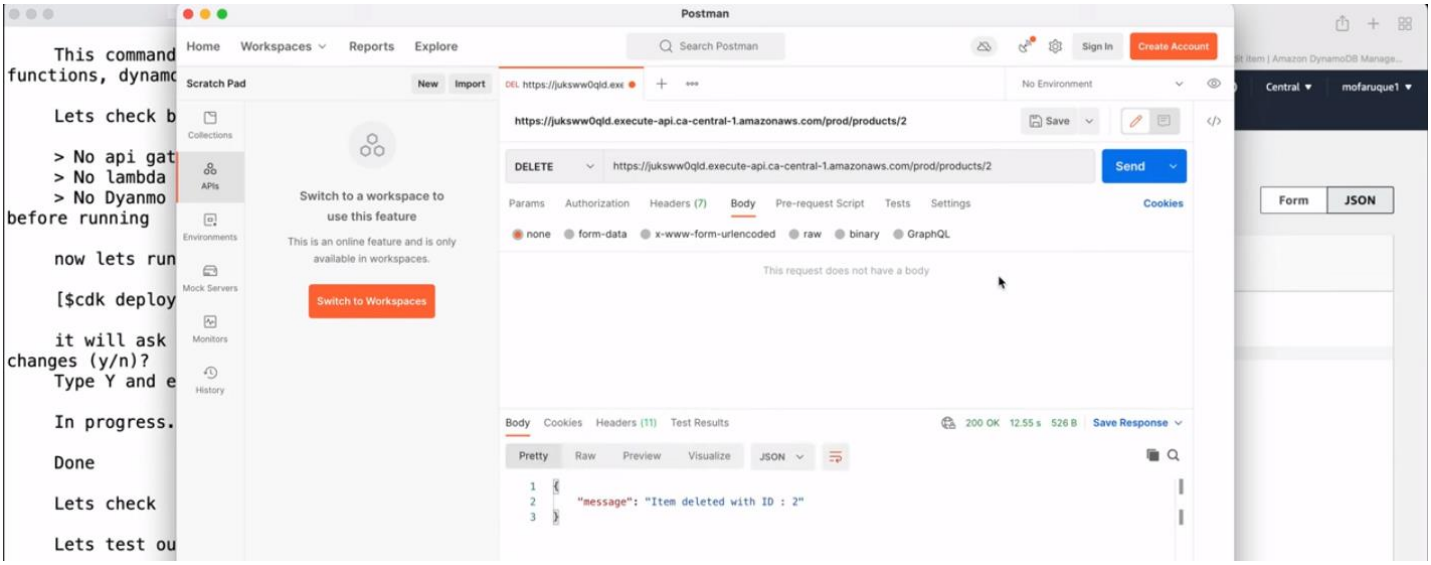
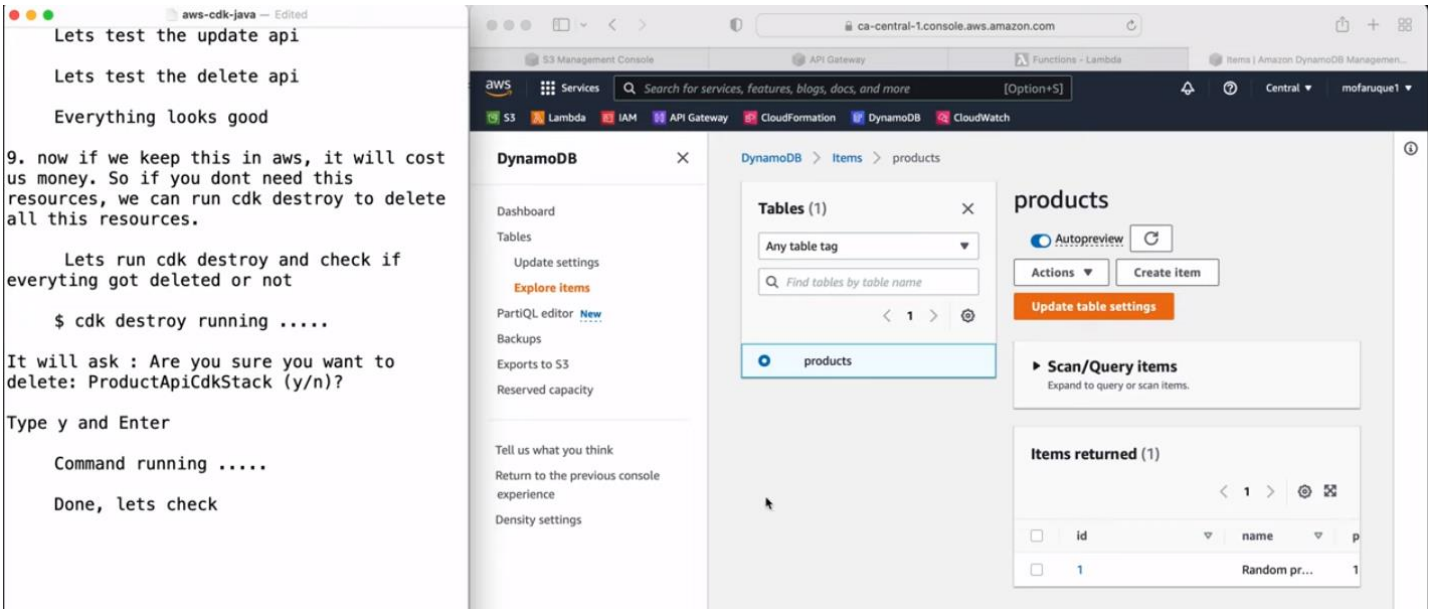
Central
mofaruque1
S3
Lambda
IAM
API Gateway
CloudFormation
DynamoDB
CloudWatch
DynamoDB > Items: products > Item editor
Item editor
Form
JSON
Attributes
View DynamoDB JSON
{
"id": 2,
"name": "Random product updated v3",
"price": 49.8
}


aws-cdk-java — Edited
This command will create all the functions, dynamo table and api gateway
Lets check before running the command
> No api gateway
> No lambda function
> No Dyanmo Table
before running
now lets run the command.
[$cdk deploy] command running...
it will ask Do you wish to deploy these changes (y/n)?
Type Y and enter
In progress.....
Done
Lets check
Lets test our api from postman
Postman
Search Postman
Sign In
Create Account
PATCH https://jukswww0qld.execute-api.ca-central-1.amazonaws.com/prod/products/2
No Environment
Save
PATCH
https://jukswww0qld.execute-api.ca-central-1.amazonaws.com/prod/products/2
Send
Params
Authorization
Headers (9)
Body
Pre-request Script
Tests
Settings
Cookies
none
form-data
x-www-form-urlencoded
raw
binary
GraphQL
JSON
Beautify
{
"name":"Random product updated v3",
"price":49.80
}
Body
Cookies
Headers (11)
Test Results
200 OK
594 ms
526 B
Save Response
Pretty
Raw
Preview
Visualize
JSON
{
"message": "Item Updated with ID : 2"
}
Central
mofaruque1
Form
JSON


Postman
Home
Workspaces
Reports
Explore
Search Postman
Sign In
Create Account
Scratch Pad
New
Import
DEL https://jukswww0qld.exe
No Environment
Collections
APIs
Environments
Mock Servers
Monitors
History
Switch to a workspace to use this feature
This is an online feature and is only available in workspaces.
Switch to Workspaces
https://jukswww0qld.execute-api.ca-central-1.amazonaws.com/prod/products/2
Save
DELETE
https://jukswww0qld.execute-api.ca-central-1.amazonaws.com/prod/products/2
Send
Params
Authorization
Headers (7)
Body
Pre-request Script
Tests
Settings
Cookies
none
form-data
x-www-form-urlencoded
raw
binary
GraphQL
This request does not have a body
Body
Cookies
Headers (11)
Test Results
200 OK
12.55 s
526 B
Save Response
Pretty
Raw
Preview
Visualize
JSON
{
"message": "Item deleted with ID : 2"
}
Central
mofaruque1
Form
JSON


aws-cdk-java — Edited
Lets test the update api
Lets test the delete api
Everything looks good
9. now if we keep this in aws, it will cost us money. So if you dont need this resources, we can run cdk destroy to delete all this resources.
Lets run cdk destroy and check if everyting got deleted or not
$ cdk destroy running .....
It will ask : Are you sure you want to delete: ProductApiCdkStack (y/n)?
Type y and Enter
Command running .....
Done, lets check
ca-central-1.console.aws.amazon.com
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API Gateway
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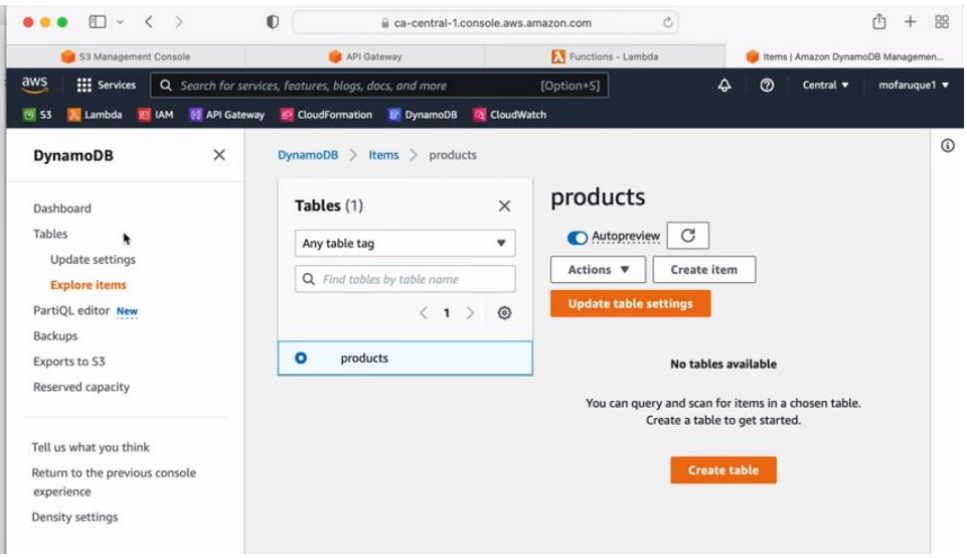


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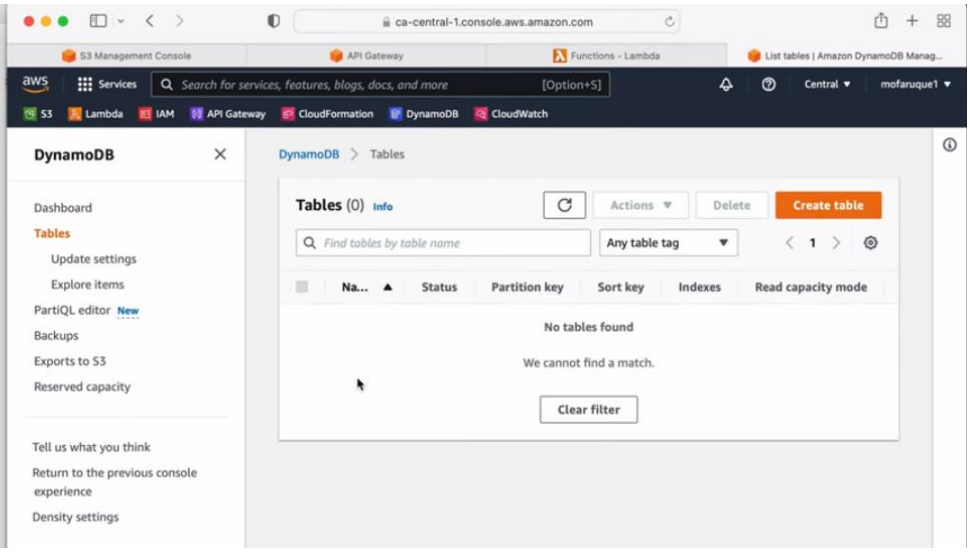


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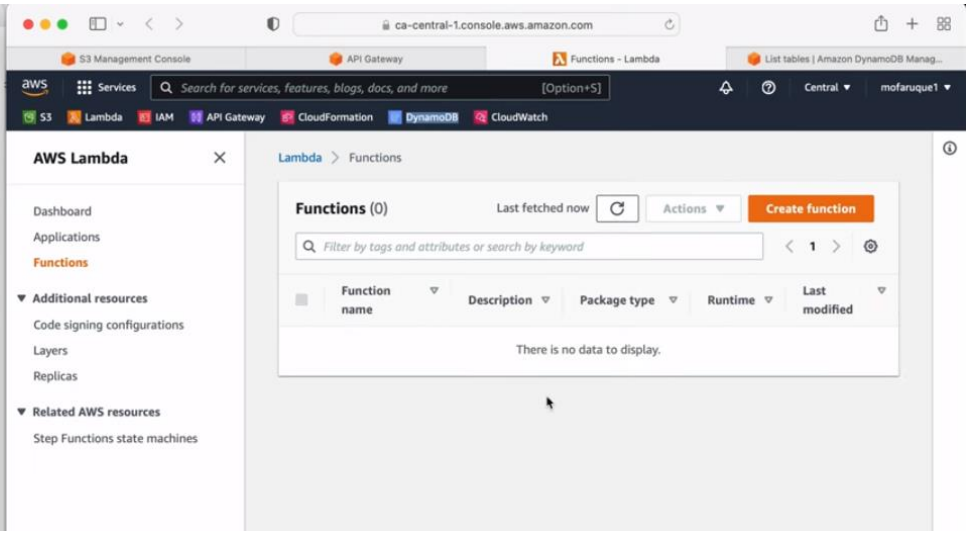

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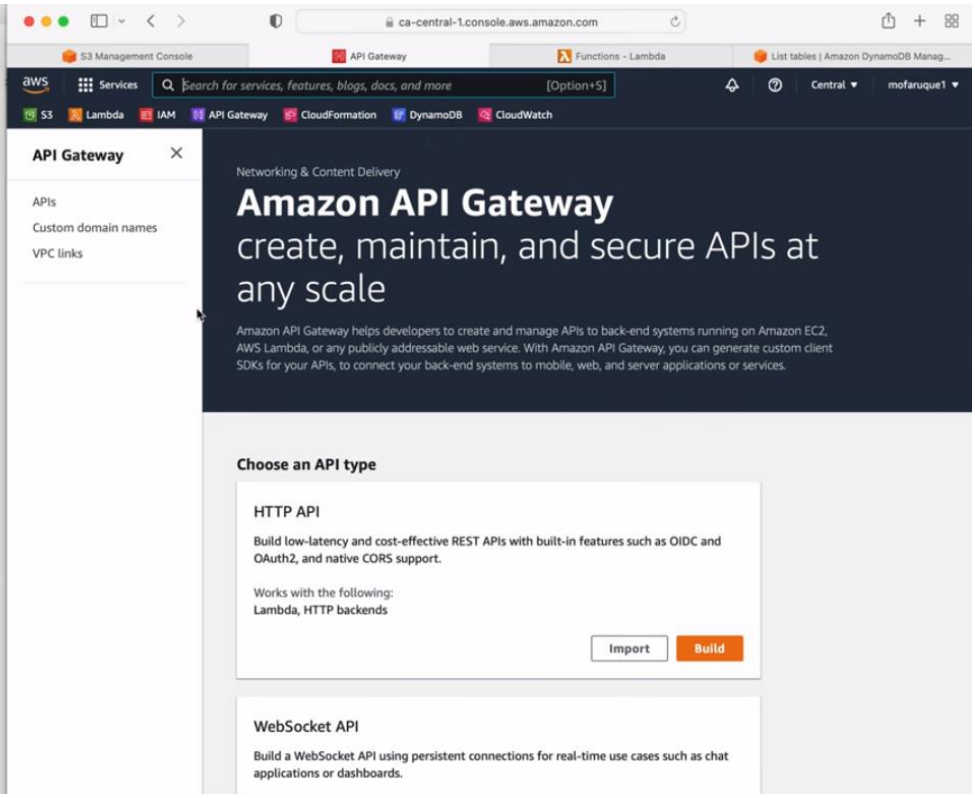


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Type y and Enter

    Command running .....

    Done, lets check


Some useful command

    ## Useful commands

 * `mvn package`     compile and run tests
 * `cdk ls`          list all stacks in the app
 * `cdk synth`       emits the synthesized CloudFormation template
 * `cdk deploy`      deploy this stack to your default AWS account/region
 * `cdk diff`        compare deployed stack with current state
 * `cdk docs`        open CDK documentation

THANK YOU FOR WATCHING
```