

Cloud Computing: UE20CS352

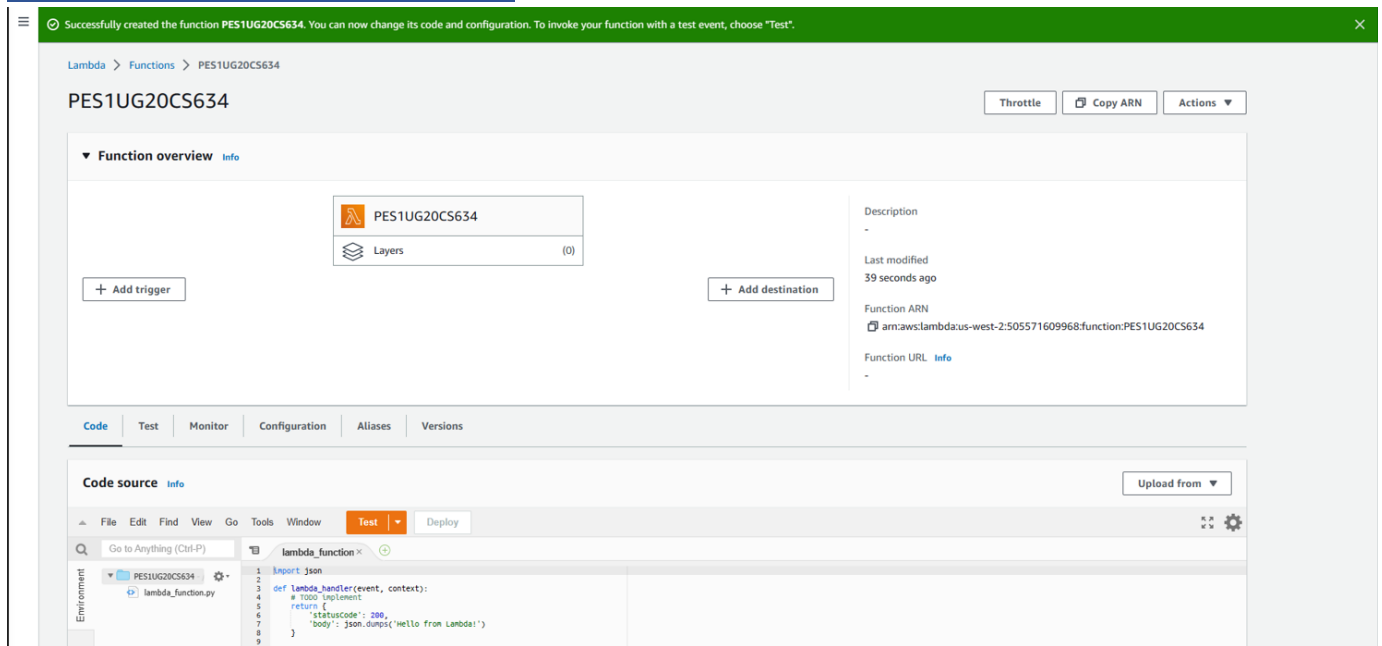
Assignment 1 - IntroDuction to AWS Lambda with API Gateway

-Chaitanya Madhav, Section K

-PES1UG20CS634

// Screenshots here are deliberately black screens; fill these in with your own.

1a: Lambda Function Created



1b: API Gateway created, trigger added

Lambda > Functions > PES1UG20CS634

PES1UG20CS634

ThrottleCopy ARNActions

The trigger PES1UG20CS634-API was successfully added to function PES1UG20CS634. The function is now receiving events from the trigger.

▼ Function overviewInfo

PES1UG20CS634

Layers (0)

API Gateway

+ Add trigger

+ Add destination

Description

Last modified 3 minutes ago

Function ARN `arn:aws:lambda:us-west-2:505571609968:function:PES1UG20CS634`

Function URL [Info](#)

CodeTestMonitorConfigurationAliasesVersions

General configuration

TriggersPermissionsDestinationsFunction URLEnvironment variables

Triggers (1)Info

Find triggers

☐ Trigger

API Gateway: PES1UG20CS634-API

`arn:aws:execute-api:us-west-2:505571609968:uxyn5itb3l/*/*/PES1UG20CS634`

API endpoint: <https://uxyn5itb3l.execute-api.us-west-2.amazonaws.com/default/PES1UG20CS634>

Details

Fix errorsEditDeleteAdd trigger

< 1 >

←→↻

<https://uxyn5itb3l.execute-api.us-west-2.amazonaws.com/default/PES1UG20CS634>

"Hello from Lambda!"

1c: Modified Lambda function

The screenshot displays the AWS Lambda console interface. The top section shows the 'Code source' tab with a file explorer on the left listing 'PES1UG20CS634' and 'lambda_function.py'. The main editor area contains the following Python code:

```
1 import json
2 import base64, csv, io
3 from statistics import mean
4
5 def lambda_handler(event, context):
6     if event['httpMethod'] == 'GET':
7         val = event['queryStringParameters']['key']
8         return {
9             'statusCode': 200,
10            'body': json.dumps(F"PES1UG20CS634: {val}")
11        }
12     elif event['httpMethod'] == 'POST':
13         base64csv = event['body']
14         if base64csv == None:
15             return {
16                 'statusCode': 200,
17                 'body': json.dumps("No CSV found.")
18             }
19
20         rows = []
21         decrypted = base64.b64decode(str(base64csv)).decode('utf-8')
22
23         with io.StringIO(decrypted) as fp:
24             reader = list(csv.reader(fp, delimiter=".", quotechar=""))
25             for row in reader[4:-2]:
26                 rows.append(row)
27
28             transposed = [list(l) for i in zip("rows")]
29
30             avg = dict()
31             for person_times in transposed:
32                 person = person_times[0]
33                 times = [float(time) for time in person_times[1:]]
34                 avg[person] = mean(times)
35
36             return {
37                 'statusCode': 200,
38                 'body': json.dumps(str(avg))
39             }
40         else:
41             return {
42                 'statusCode': 200,
43                 'body': json.dumps("Only GET and POST are supported")
44             }
45
46
```

Below the code editor, a green notification bar states: "Successfully updated the function PES1UG20CS634." Below this, the 'Add trigger' dialog is open, showing the 'Trigger configuration' section with a dropdown menu labeled 'Select a source' and 'Cancel' and 'Add' buttons.

1d: Successful Postman GET request

The screenshot shows the Postman interface with a GET request configured and executed successfully. The URL is `https://uxyn5itb3l.execute-api.us-west-2.amazonaws.com/default/PES1UG20CS634?key=Chaitanya Madhav/`. The response status is 200 OK, with a time of 2.67 s and a size of 209 B. The response body is displayed in the 'Body' tab, showing the text `PES1UG20CS634: Chaitanya Madhav/`.

Query Params

KEY	VALUE	DESCRIPTION
<input checked="" type="checkbox"/> key	Chaitanya Madhav/	
Key	Value	Description

Body

Pretty Raw Preview Visualize JSON

```
1 PES1UG20CS634: Chaitanya Madhav/
2
3
```

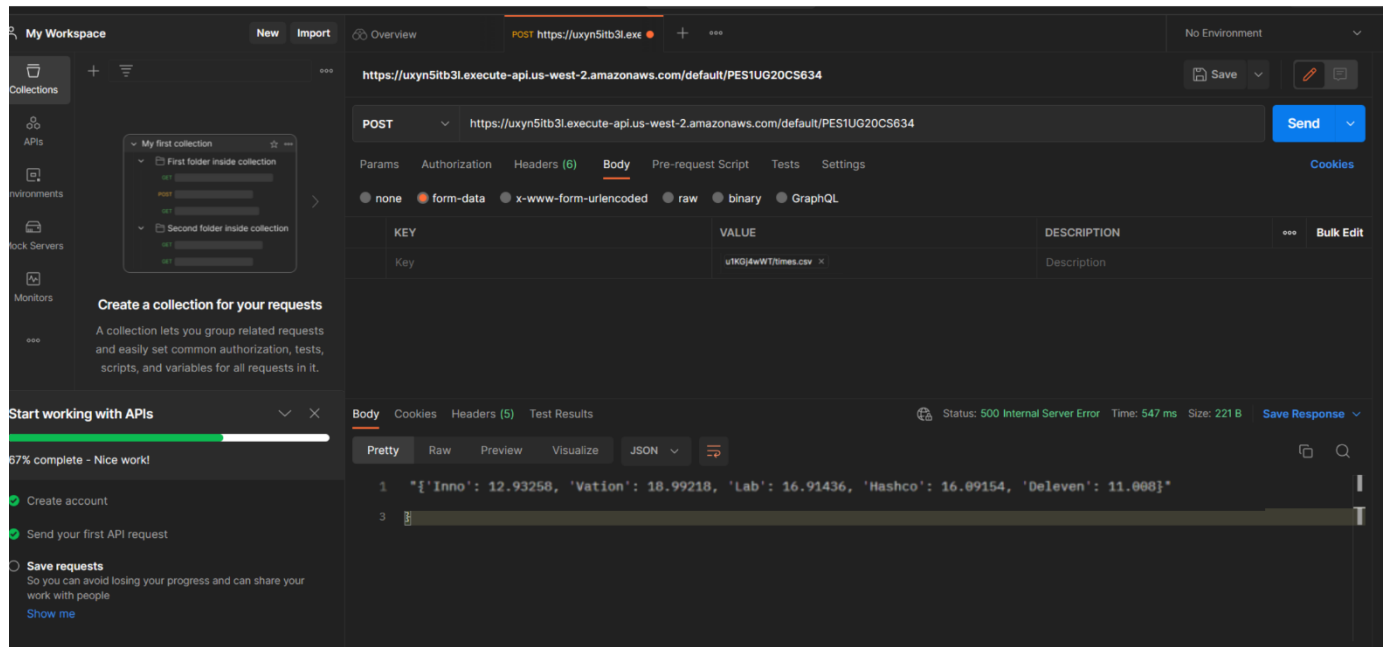
Start working with APIs

67% complete - Nice work!

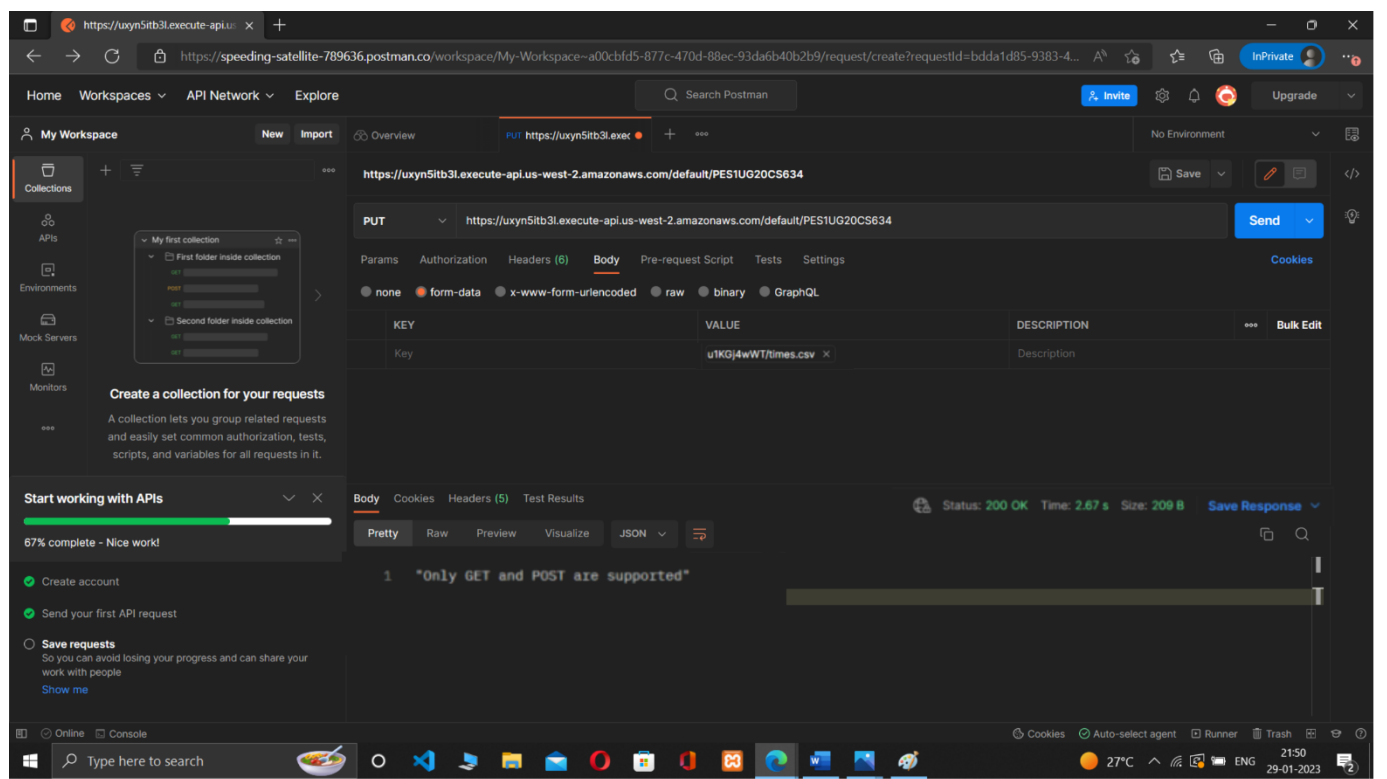
- ☒ Create account
- ☒ Send your first API request
- ☐ Save requests

So you can avoid losing your progress and can share your work with people. [Show me](#)

1e: Successful Postman POST request



1f: Failed Postman PUT/DELETE/HEAD request



Postman interface showing a DELETE request to `https://uxyn5itb3l.execute-api.us-west-2.amazonaws.com/default/PES1UG20CS634`. The request is configured with the following headers:

KEY	VALUE	DESCRIPTION
Key	u1KQj4wWT/imes.csv	Description

The response status is 200 OK, Time: 2.67 s, Size: 209 B. The response body is:

```
1 "Only GET and POST are supported"
```

The interface also shows a sidebar with "My Workspace" and "Collections" sections, and a bottom status bar with system information.

Postman interface showing a HEAD request to `https://uxyn5itb3l.execute-api.us-west-2.amazonaws.com/default/PES1UG20CS634`. The request is configured with the following headers:

KEY	VALUE	DESCRIPTION
Key	u1KQj4wWT/imes.csv	Description

The response status is 200 OK, Time: 2.67 s, Size: 209 B. The response body is:

```
1 "Only GET and POST are supported"
```

The interface also shows a sidebar with "My Workspace" and "Collections" sections, and a bottom status bar with system information.

