

Use case

Serverless Feedback Application

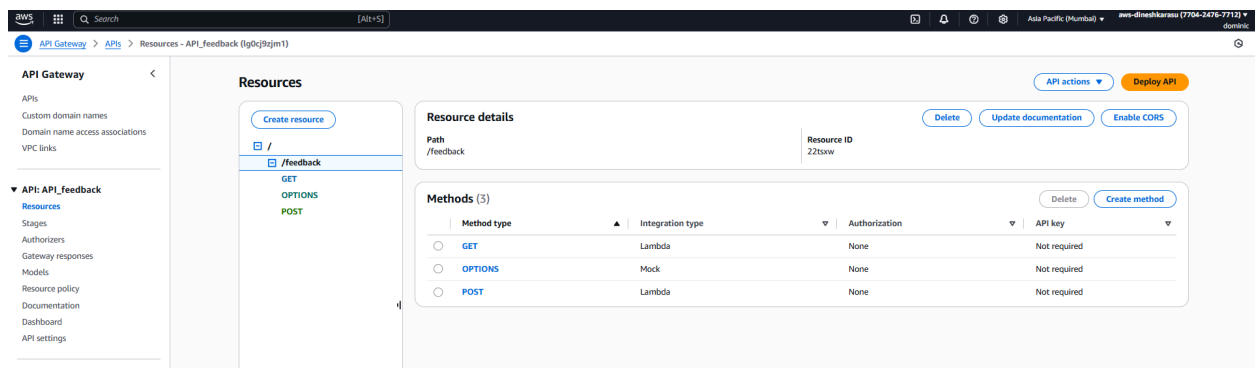
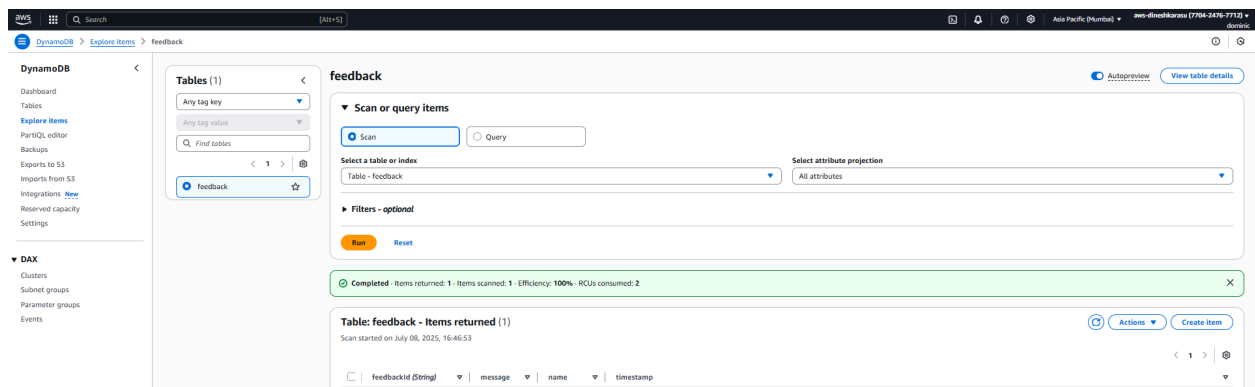
Use case Description

Frontend form (HTML/JS) -> API Gateway -> Lambda -> DynamoDB.

Store and retrieve feedback using AWS services

Approach :

1. Create a DynamoDB Table named feedback
2. Create a Lambda Function Add IAM permissions for the function to get item and put item
3. Implement Logic in lambda to store and retrieve feedbacks
4. Create an API Gateway to trigger Lambda for storing and retrieving
5. Build a Simple Frontend (HTML + JS)
6. Create a form to collect feedback (e.g., name, message)
7. Dump the files in an S3 bucket and enable static website hosting
8. Test



```
EXPLORER
LAMBDA_STORE_RETRIEVE_FEEDBACK
lambda_function.py

DEPLOY
Deploy (Ctrl+Shift+U)
Test (Ctrl+Shift+T)

TEXT EVENTS (NONE SELECTED)
+ Create new test event

ENVIRONMENT VARIABLES

lambda_function.py
1 import json
2 import boto3
3 import uuid
4 from datetime import datetime
5
6 TABLE_NAME = "feedback"
7
8 dynamodb = boto3.resource('dynamodb')
9 table = dynamodb.Table(TABLE_NAME)
10
11 def lambda_handler(event, context):
12     method = event.get('httpMethod')
13     headers = {
14         'Access-Control-Allow-Origin': '*',
15         'Access-Control-Allow-Methods': 'GET,POST,OPTIONS',
16         'Access-Control-Allow-Headers': 'Content-Type'
17     }
18
19     # POST /feedback
20     if method == 'POST':
21         try:
22             body = json.loads(event['body'])
23             name = body.get('name')
24             message = body.get('message')
25
26             if not name or not message:
27                 return {
28                     'statusCode': 400,
29                     'headers': headers,
30                     'body': json.dumps({'error': 'Both name and message are required.'})
31                 }
32
33             item = {
34                 'feedbackId': str(uuid.uuid4()),
35                 'name': name,
36                 'message': message,
37                 'timestamp': datetime.utcnow().isoformat()
38             }
39             table.put_item(Item=item)
40
41             return {
42                 'statusCode': 200,
43                 'headers': headers,
44                 'body': json.dumps({'message': 'Feedback submitted successfully.'})
45             }
46         except Exception as e:
47             return {
48                 'statusCode': 500,
49                 'headers': headers,
50                 'body': json.dumps({'error': f'Failed to process request: {str(e)}'})
51             }
```

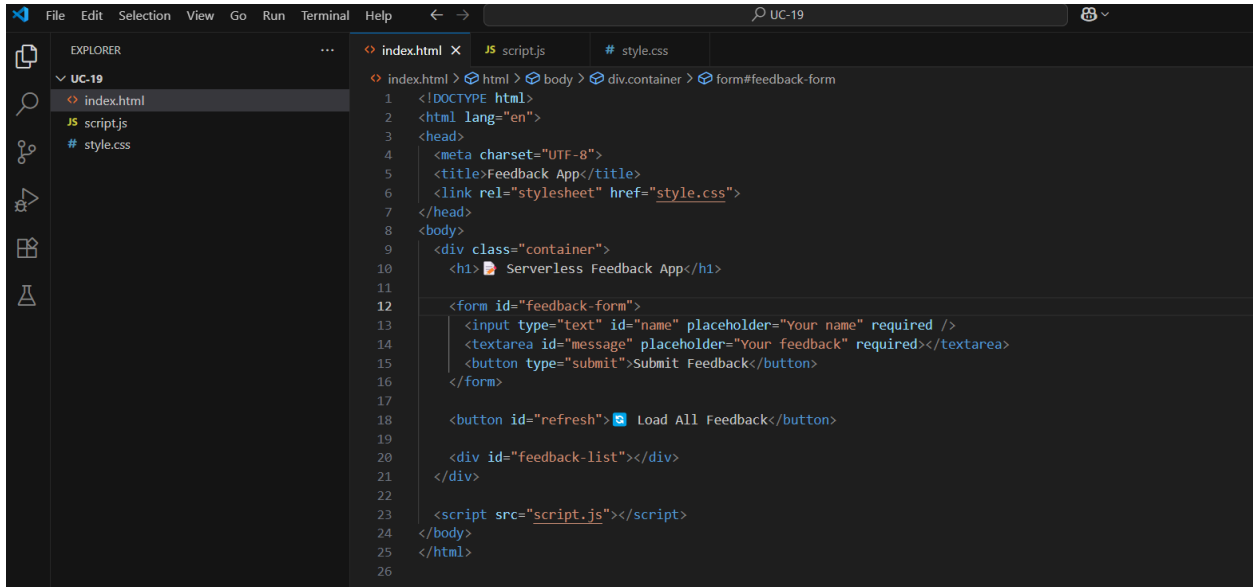
```
EXPLORER
LAMBDA_STORE_RETRIEVE_FEEDBACK
lambda_function.py

DEPLOY
Deploy (Ctrl+Shift+U)
Test (Ctrl+Shift+T)

TEXT EVENTS (NONE SELECTED)
+ Create new test event

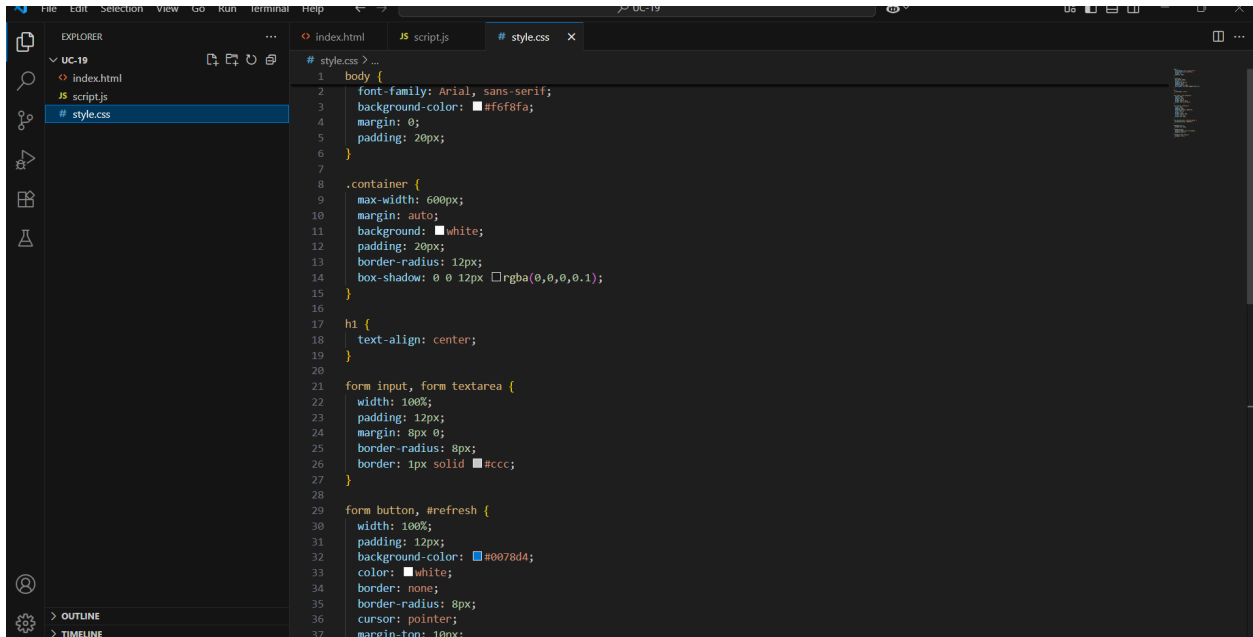
ENVIRONMENT VARIABLES

lambda_function.py
11 def lambda_handler(event, context):
12     if method == 'POST':
13         try:
14             return {
15                 'statusCode': 200,
16                 'headers': headers,
17                 'body': json.dumps({'message': 'Feedback submitted successfully.'})
18             }
19         except Exception as e:
20             return {
21                 'statusCode': 500,
22                 'headers': headers,
23                 'body': json.dumps({'error': f'Failed to process request: {str(e)}'})
24             }
25
26     # GET /feedback
27     elif method == 'GET':
28         try:
29             response = table.scan()
30             feedback_items = response.get('Items', [])
31
32             return {
33                 'statusCode': 200,
34                 'headers': headers,
35                 'body': json.dumps(feedback_items)
36             }
37         except Exception as e:
38             return {
39                 'statusCode': 500,
40                 'headers': headers,
41                 'body': json.dumps({'error': f'Failed to fetch feedback: {str(e)}'})
42             }
43
44     # Unsupported Method
45     else:
46         return {
47             'statusCode': 405,
48             'headers': headers,
49             'body': json.dumps({'error': f'Method {method} not allowed'})
50         }
```



This screenshot shows the Visual Studio Code editor with the 'index.html' file open. The Explorer sidebar on the left shows the project structure with 'index.html', 'script.js', and 'style.css'. The breadcrumb navigation at the top of the editor indicates the path: 'index.html > html > body > div.container > form#feedback-form'. The main editor area displays the HTML code for 'index.html', which includes a DOCTYPE declaration, a meta charset, a title 'Feedback App', a link to 'style.css', a container div with a heading 'Serverless Feedback App', a feedback form with an input field, a text area, and a submit button, a 'refresh' button, and a feedback list container. A script tag for 'script.js' is also present at the bottom.

```
1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4   <meta charset="UTF-8">
5   <title>Feedback App</title>
6   <link rel="stylesheet" href="style.css">
7 </head>
8 <body>
9   <div class="container">
10    <h1> Serverless Feedback App</h1>
11
12    <form id="feedback-form">
13      <input type="text" id="name" placeholder="Your name" required />
14      <textarea id="message" placeholder="Your feedback" required></textarea>
15      <button type="submit">Submit Feedback</button>
16    </form>
17
18    <button id="refresh"> Load All Feedback</button>
19
20    <div id="feedback-list"></div>
21  </div>
22
23  <script src="script.js"></script>
24 </body>
25 </html>
26
```



This screenshot shows the Visual Studio Code editor with the 'style.css' file open. The Explorer sidebar on the left shows the project structure with 'index.html', 'script.js', and 'style.css'. The breadcrumb navigation at the top of the editor indicates the path: '# style.css > ...'. The main editor area displays the CSS code for 'style.css', which defines styles for the body, container, h1, form input, form textarea, form button, and #refresh button. The styles include font-family, background-color, margin, padding, border-radius, box-shadow, text-align, width, and color.

```
1 body {
2   font-family: Arial, sans-serif;
3   background-color: #f6f8fa;
4   margin: 0;
5   padding: 20px;
6 }
7
8 .container {
9   max-width: 600px;
10  margin: auto;
11  background: white;
12  padding: 20px;
13  border-radius: 12px;
14  box-shadow: 0 0 12px rgba(0,0,0,0.1);
15 }
16
17 h1 {
18   text-align: center;
19 }
20
21 form input, form textarea {
22   width: 100%;
23   padding: 12px;
24   margin: 8px 0;
25   border-radius: 8px;
26   border: 1px solid #ccc;
27 }
28
29 form button, #refresh {
30   width: 100%;
31   padding: 12px;
32   background-color: #0078d4;
33   color: white;
34   border: none;
35   border-radius: 8px;
36   cursor: pointer;
37   margin-top: 10px;
38 }
```

```
File Edit Selection View Go Run Terminal Help
UC-19
index.html script.js style.css
script.js
1 const API_URL = 'https://lbc-02-jm1.execute-api.ap-south-1.amazonaws.com/Dev/feedback';
2
3 document.getElementById('feedback-form').addEventListener('submit', async function (e) {
4   e.preventDefault();
5
6   const name = document.getElementById('name').value.trim();
7   const message = document.getElementById('message').value.trim();
8
9   if (!name || !message) return alert("Please fill in both fields!");
10
11   const response = await fetch(API_URL, {
12     method: 'POST',
13     headers: {
14       'Content-Type': 'application/json'
15     },
16     body: JSON.stringify({ name, message })
17   });
18
19   const result = await response.json();
20   alert(result.message || result.error);
21
22   document.getElementById('name').value = '';
23   document.getElementById('message').value = '';
24   loadFeedback(); // refresh list
25 });
26
27 document.getElementById('refresh').addEventListener('click', loadFeedback);
28
29 async function loadFeedback() {
30   const response = await fetch(API_URL);
31   const feedbacks = await response.json();
32
33   const list = document.getElementById('feedback-list');
34   list.innerHTML = '';
35
36   feedbacks.sort((a, b) => new Date(b.timestamp) - new Date(a.timestamp));
37
38   feedbacks.forEach(fb => {
39     const div = document.createElement('div');
40     div.className = 'feedback-item';
41     div.innerHTML = `
42       <strong>${fb.name}</strong>
43       <small>${new Date(fb.timestamp).toLocaleString()}</small>
44       <p>${fb.message}</p>
45     `;
46     list.appendChild(div);
47   });
48 }
```

Amazon S3 Buckets s3-feedback-website

s3-feedback-website info

Objects Properties Permissions Metrics Management Access Points

Objects (3) Copy S3 URI Copy URL Download Open Delete Actions Create folder Upload

Find objects by prefix

Name	Type	Last modified	Size	Storage class
index.html	html	July 8, 2025, 14:38:51 (UTC+05:30)	647.0 B	Standard
script.js	js	July 8, 2025, 14:38:51 (UTC+05:30)	1.5 KB	Standard
style.css	css	July 8, 2025, 14:38:52 (UTC+05:30)	870.0 B	Standard

Static website hosting

Use this bucket to host a website or redirect requests. Learn more

We recommend using AWS Amplify Hosting for static website hosting. Deploy a fast, secure, and reliable website quickly with AWS Amplify Hosting. Learn more about Amplify Hosting or View your existing Amplify apps. Create Amplify app

S3 static website hosting Enabled

Hosting type Bucket hosting

Bucket website endpoint When you configure your bucket as a static website, the website is available at the AWS Region-specific website endpoint of the bucket. Learn more

http://s3-feedback-website.s3-website-ap-south-1.amazonaws.com

