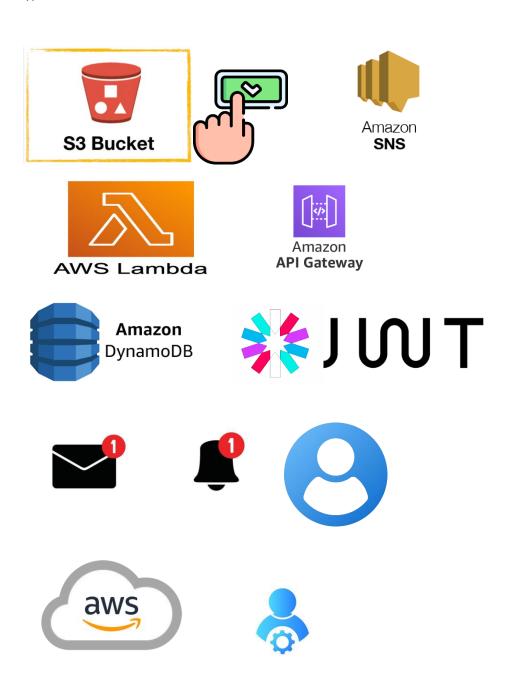
AN USEFUL AWS POWERED APPLICATION FOR EVENT ANNOUNCEMENT ALERTS

EVENT ANNOUNCEMENT SYTEM USING AWS AND ITS SERVICES

AWS SERVICES USED AND OTHERS:

1.



Amazon S3:

Used to host static frontend files and serve the website over the internet.

API Gateway:

Acts as the entry point for HTTP requests, routing them to the appropriate backend service.

AWS Lambda:

Handles backend logic and processing when triggered by API Gateway.

Amazon DynamoDB:

Stores structured data with low latency and high availability.

Amazon SNS:

Sends notifications (e.g., emails) to subscribers when triggered by backend events.

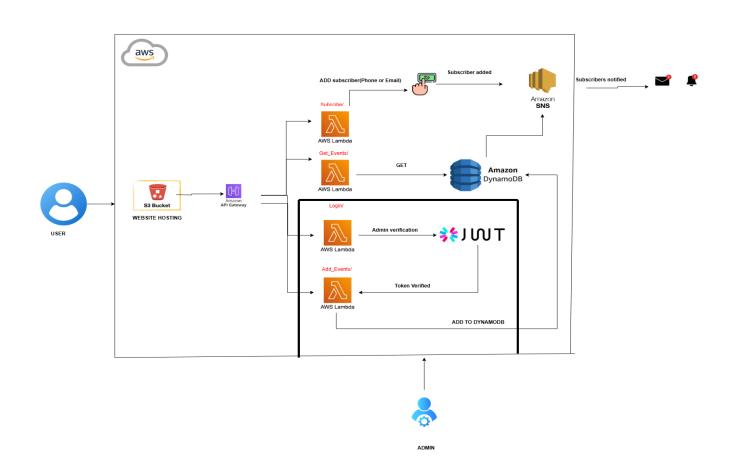
IAM Roles:

Manage permissions and securely allow services like Lambda to access DynamoDB and SNS.

JWT:

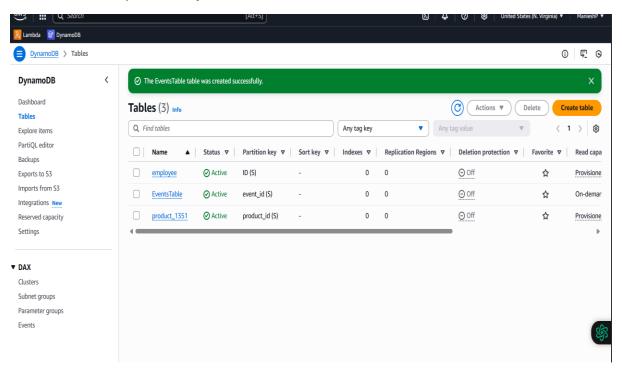
Used for verifying user identity and controlling access to protected resources.

Architecture diagram:

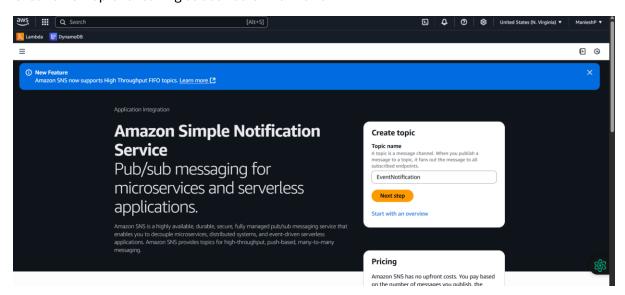


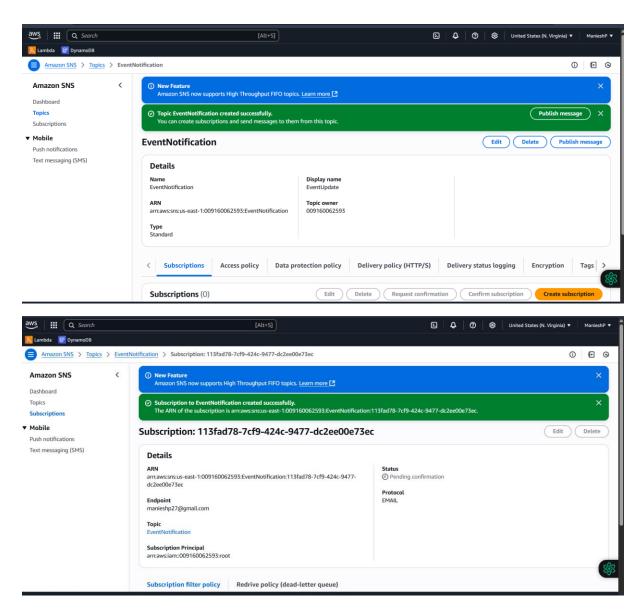
Creation of DynamoDB table:

event_id acts as a partition key:



Creation of topic for saving subscribers information:

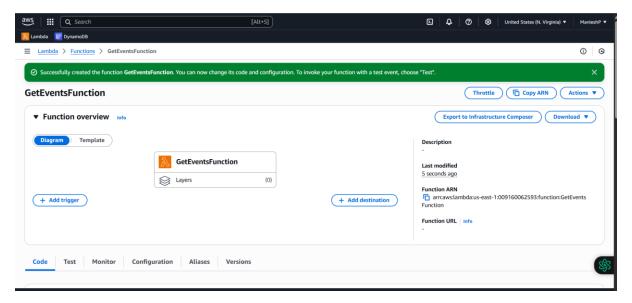


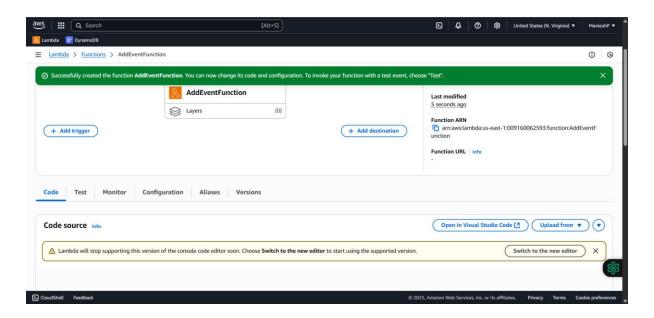


ARN:

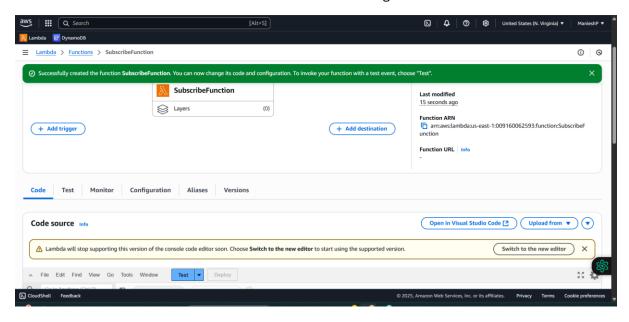
arn:aws:sns:us-east-1:009160062593:EventNotification

Get_events lambda function retrieves events from Dynamo table:

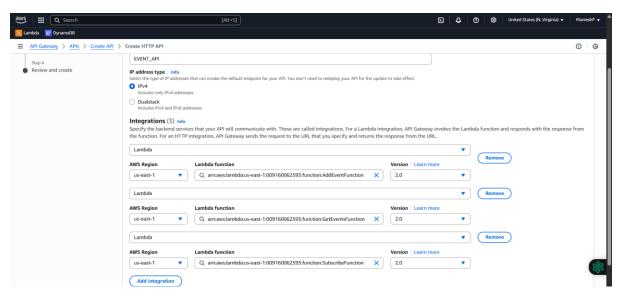


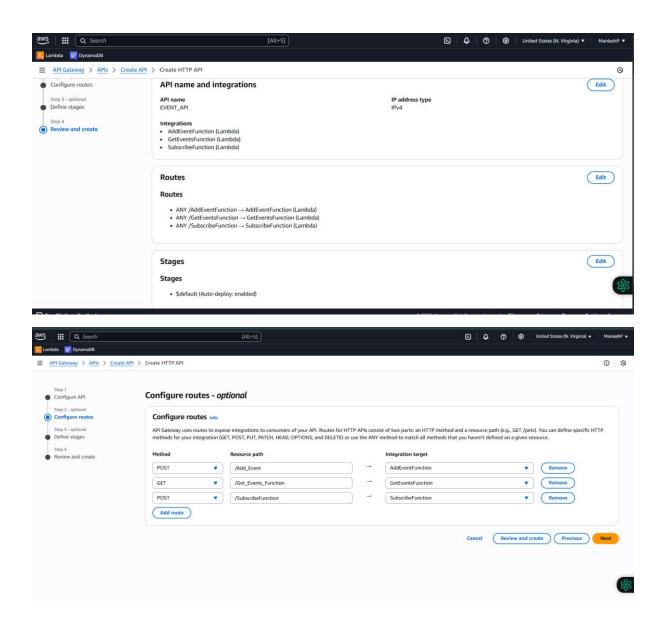


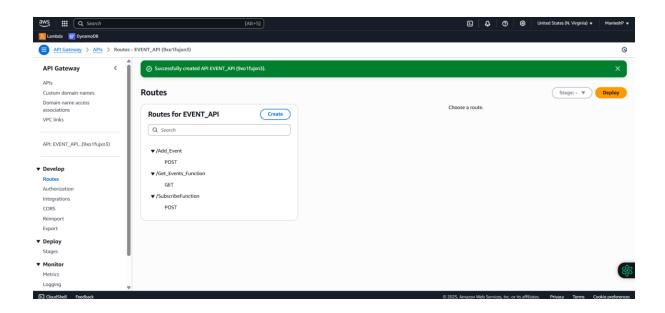
Subscribe function facilitates new subscriber add on through confirmation:



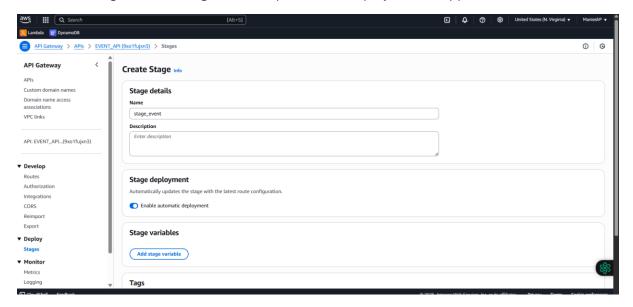
Addition of lambda function routes into the API (Event_API):



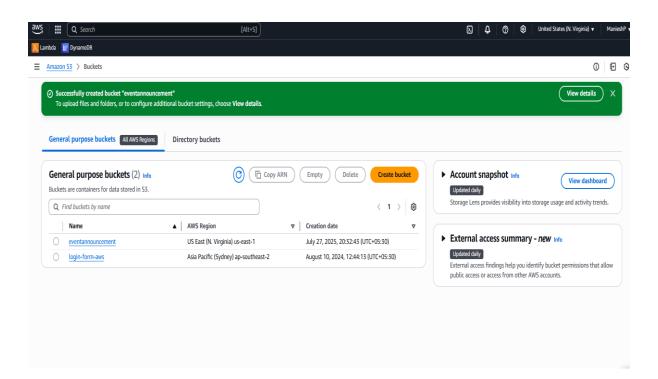




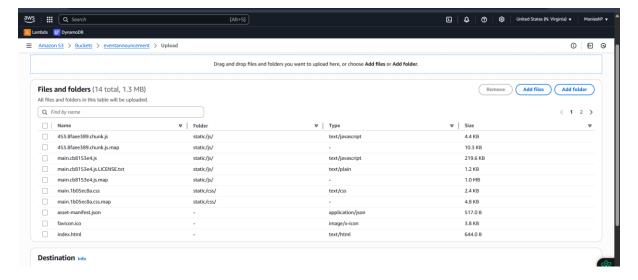
Creation of stage ensures stage of development and deployment of application:

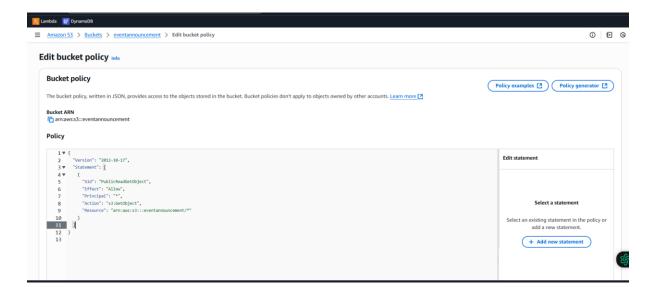


https://9xo1fujxn3.execute-api.us-east-1.amazonaws.com/stage_event

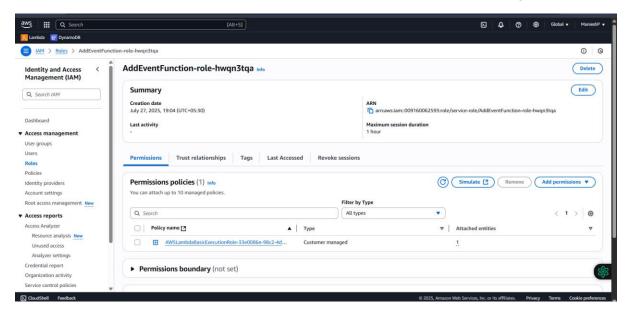


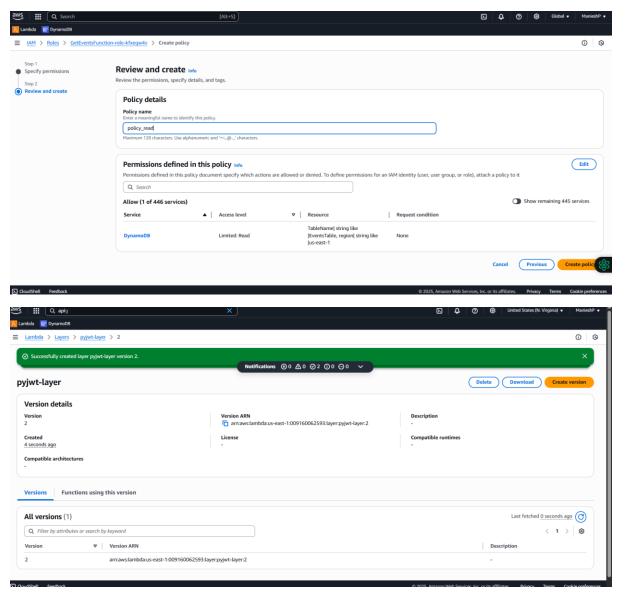
Uploading frontend code to S3 bucket:





Addition of IAM roles to the Add event function to be invoked only when admin logins:





Working:

