A diagram of a cloud

Description automatically generated**1. Create DynamoDB instance and initial Time-to-live**

Step 1: go Amazon DynamoDB page

A screenshot of a computer

Description automatically generated

Step 2: Create table

A screenshot of a computer

Description automatically generated

Step 3: Create table

A screenshot of a computer

Description automatically generated

Step 4: Turn on DynamoDB stream detail

Navigate to Exports and streams

A screenshot of a computer

Description automatically generated

Step 5: Turn on, select New and Old images

A screenshot of a computer

Description automatically generated

Step 6: Turn on stream

A screenshot of a computer

Description automatically generated

Step 7: turn on Time-to-live: navigate to Additional Settings

A screenshot of a computer

Description automatically generated

Step 8 Turn on

TTL atribute name: ttl

A screenshot of a computer

Description automatically generated

Step 9 Turn on TTL

A screenshot of a computer

Description automatically generated

Step 10: Insert data to asm2-ccp302x table on DynamoDB instance

A screenshot of a computer

Description automatically generated

Step 11: Create item

A screenshot of a computer

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Step 12

A screenshot of a computer

Description automatically generated

**2. Create DynamoDB Stream to active Lambda Function**

Step 13

A screenshot of a computer

Description automatically generated

**3. Create lambda function to create Reminder**

Step 14 Navigate to AWS Lambda Service

A screenshot of a computer screen

Description automatically generated

Step 15 Create a function

Function name: asm2-put-reminder

Runtime: Python 3.9

A screenshot of a computer

Description automatically generated

Step 16

Select: Use an existing role

Lambda\_dynamodb\_role

A screenshot of a computer

Description automatically generated

Step 17 Create function

A screenshot of a computer

Description automatically generated

Step 18: code for put reminder to DynamoDB

A screenshot of a computer

Description automatically generated

Step 19 Click Deploy: Deploy successfully

A screenshot of a computer

Description automatically generated

Step 20: Put to DynamoDB successfully

A screenshot of a computer

Description automatically generated

4. Create lambda function to get Reminder by ID

Step 21 click function

A screenshot of a computer

Description automatically generated

Step 22: create function

Function name: asm2-get-reminder

Runtime: python 3.9

A screenshot of a computer

Description automatically generated

Step 23

A screenshot of a computer

Description automatically generated

Step 24 Create function

A screenshot of a computer

Description automatically generated

Step 25 Deploy code get reminder by ID

A screenshot of a computer

Description automatically generated

Step 26 Click test

A screenshot of a computer test

Description automatically generated

Step 27 Save and click Test

Result: ID: 1, message: Publish next Youtube Video

A screenshot of a computer

Description automatically generated

**5. Create Lambda funciton get reminder by User\_email**

Step 28 navigate to function and Create function

A screenshot of a computer

Description automatically generated

Step 29

A screenshot of a computer

Description automatically generated

Step 30

A screenshot of a computer

Description automatically generated

Step 31 Deploy to code get reminder by user\_email

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Description automatically generated

Step 32 click Test

A screenshot of a computer

Description automatically generated

Step 33 click Test to result below

A screenshot of a computer

Description automatically generated

**6. Using API Gateway create REST API**

Step 34 Navigate to API Gateway and select REST API

A close-up of a computer screen

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Step 35 Click Build

A screenshot of a computer

Description automatically generated

Step 36 Create API

A screenshot of a computer

Description automatically generated

Step 37 Create resource

A screenshot of a computer

Description automatically generated

Step 38 Create resource

A screenshot of a computer

Description automatically generated

Step 39 Create method

A screenshot of a computer

Description automatically generated

Step 40 select lambda function and put-reminder and create method

A screenshot of a computer error

Description automatically generated

Step 41

A screenshot of a computer

Description automatically generated

Step 42: click Deploy API

A screenshot of a stage setting

Description automatically generated

Step 43

A screenshot of a computer

Description automatically generated

Step 44 using postman check to PUT data to DynamoDB

A screenshot of a computer

Description automatically generated

Step 45 Result

ID: 4

Message: Get lunch

A screenshot of a computer

Description automatically generated

Step 46 Create API get reminder by ID

A screenshot of a computer

Description automatically generated

Step 47

A screenshot of a computer

Description automatically generated

Step 48 Create method

A screenshot of a computer

Description automatically generated

Step 49 select Lambda function and choose get reminder by id

A screenshot of a computer

Description automatically generated

Step 50

A screenshot of a computer

Description automatically generated

Step 51 Deploy API

A screenshot of a stage setting

Description automatically generated

Step 52

A screenshot of a computer

Description automatically generated

Step 53: need to change Authorization : AWS IAM

A screenshot of a login page

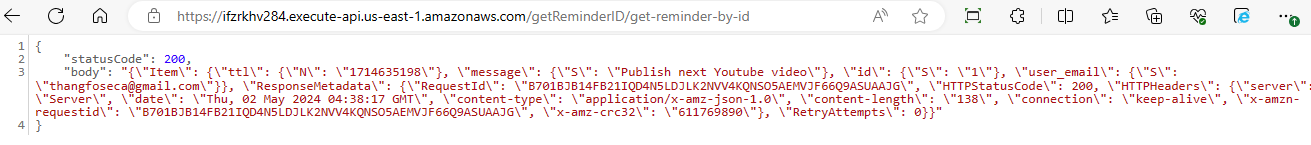
Description automatically generated

Step 54

A screenshot of a computer

Description automatically generated

Step 55: result



Step 56:

A screenshot of a computer

Description automatically generated

Step 57

A screenshot of a computer

Description automatically generated

Step 58 Create method

A screenshot of a computer

Description automatically generated

Step 59: select lambda function with get-reminder-by-user

A screenshot of a computer

Description automatically generated

Step 60: need to change Authorization: aws iam

A screenshot of a computer

Description automatically generated

Step 61

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Step 62

A screenshot of a computer

Description automatically generated

Step 63: click Deploy API

A screenshot of a stage setting

Description automatically generated

Step 64

A screenshot of a computer

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Step 65

A screenshot of a computer code

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**7. Create Lambda Function to send Email**

step 66: create lambda send email when item of dynamoDB expired

A screenshot of a computer

Description automatically generated

Step 67 create function

A screenshot of a computer

Description automatically generated

Step 68 deploy code

A screenshot of a computer program

Description automatically generated

Step 69 Add trigger

A screenshot of a computer

Description automatically generated

Step 70

A screenshot of a computer

Description automatically generated

**8. Save information of reminders was send**

Step 71 Navigate to Amazon Simple email service page and select identities

A screenshot of a computer

Description automatically generated

Step 72 Create identity

A screenshot of a computer screen

Description automatically generated

Step 73

A screenshot of a computer

Description automatically generated

Step 74 verification

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Description automatically generated

Step 75

A screenshot of a computer

Description automatically generated

Step 76

A screenshot of a computer

Description automatically generated

Step 77: create lambda function send email when item on DynamoDB has expired

A screenshot of a computer

Description automatically generated

Step 78

A screenshot of a computer

Description automatically generated

Step 79

A screenshot of a computer

Description automatically generated

Step 80: click Deploy

A screenshot of a computer

Description automatically generated

Step 81 click Add Trigger

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Description automatically generated

Step 82

A screenshot of a computer

Description automatically generated

Step 83 click Add

A screenshot of a computer

Description automatically generated

Step 84 check the system send email when item expired

A screenshot of a computer

Description automatically generated

Step 85

A screenshot of a computer

Description automatically generated

Step 86 Check email

A screenshot of a computer

Description automatically generated

A screenshot of a computer

Description automatically generated

A screenshot of a computer

Description automatically generated

Email

A screenshot of a computer

Description automatically generated

**9. Using CloudFormation to Automatic architecting**

Check file template.yml according to attachment.

**10. Edit Reminder**

Step 87 create lambda function

A screenshot of a computer

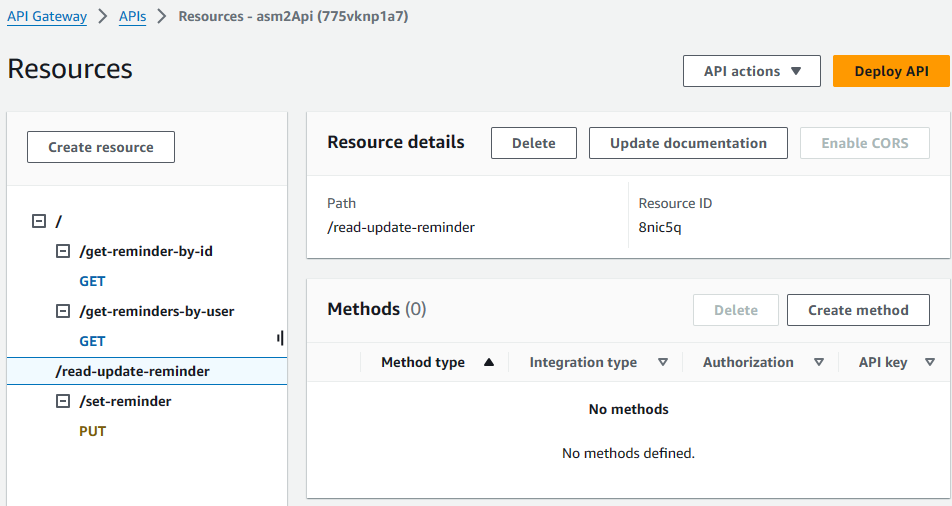
Description automatically generated

Step 88 Create method Read and Update reminder

A screenshot of a computer

Description automatically generated

Step 89



Step 90 Create method

A screenshot of a computer

Description automatically generated

A screenshot of a computer

Description automatically generated

Step 91 Deploy API

A screenshot of a stage page

Description automatically generated

Step 92: setup API key

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Step 93

A screenshot of a computer

Description automatically generated

Step 94: check result read and update reminder

A screenshot of a computer

Description automatically generated

Step 95: update reminder

A screenshot of a computer

Description automatically generated

Step 96: I will update id=3 with message = “Play football”

A screenshot of a computer

Description automatically generated

Step 97: result

A screenshot of a computer

Description automatically generated