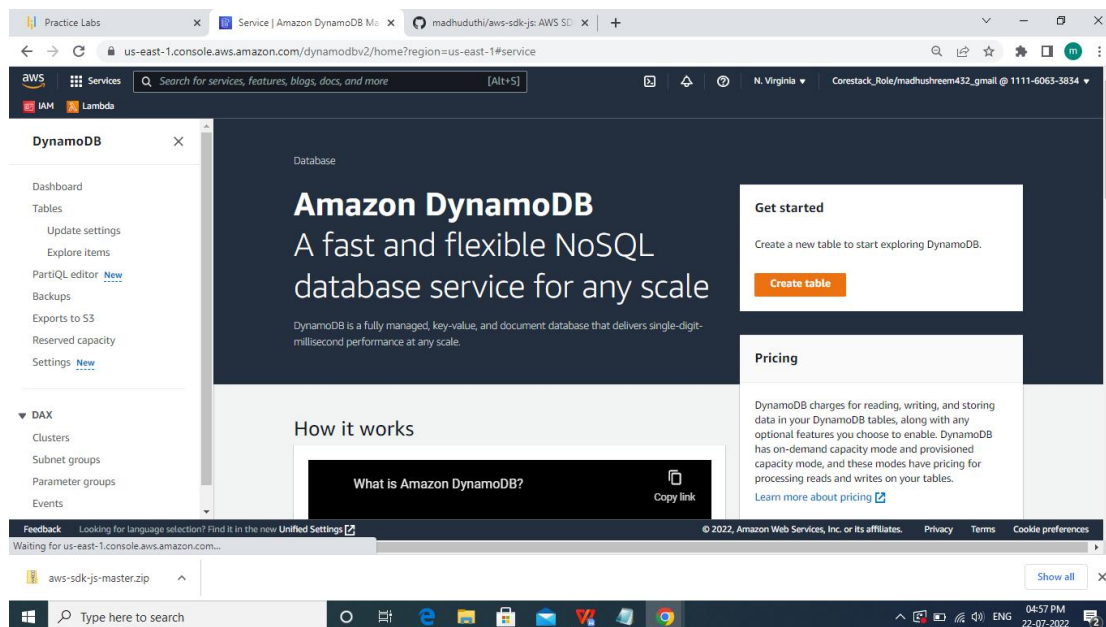


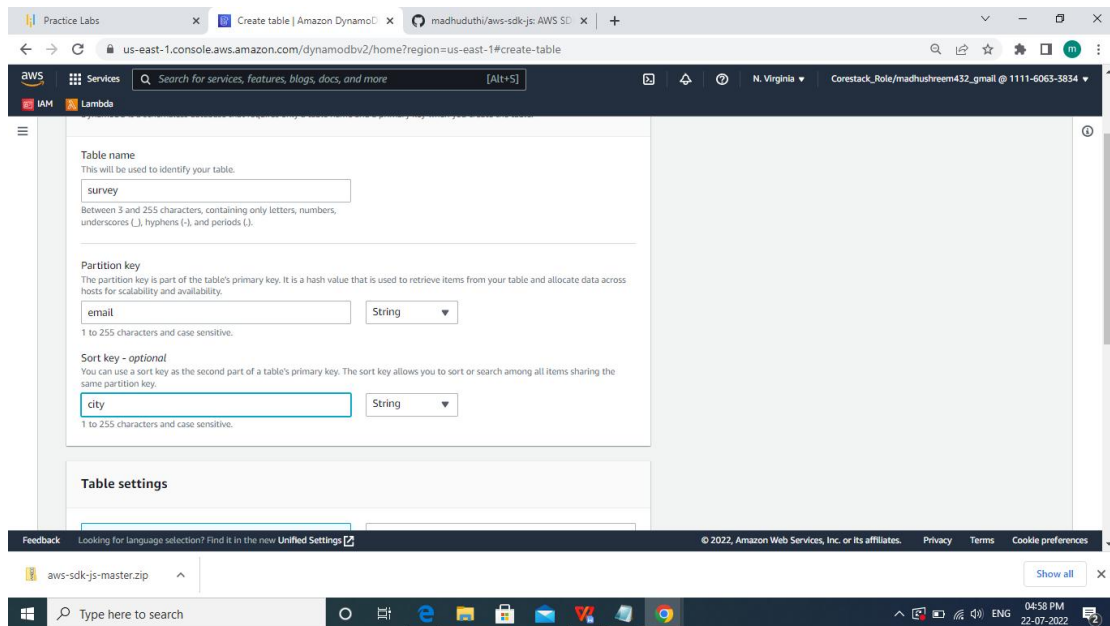
# Course End Project-2

## Architecting a website using the Serverless Technology

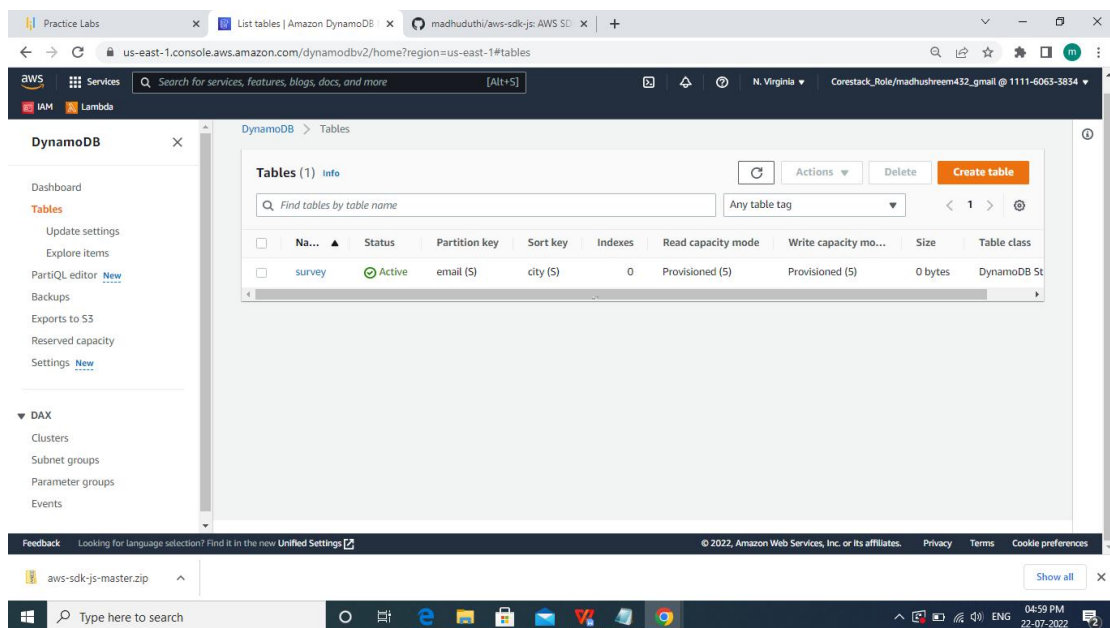
Step1: Navigate to the DynamoDB Management Console and click on 'Create table'.



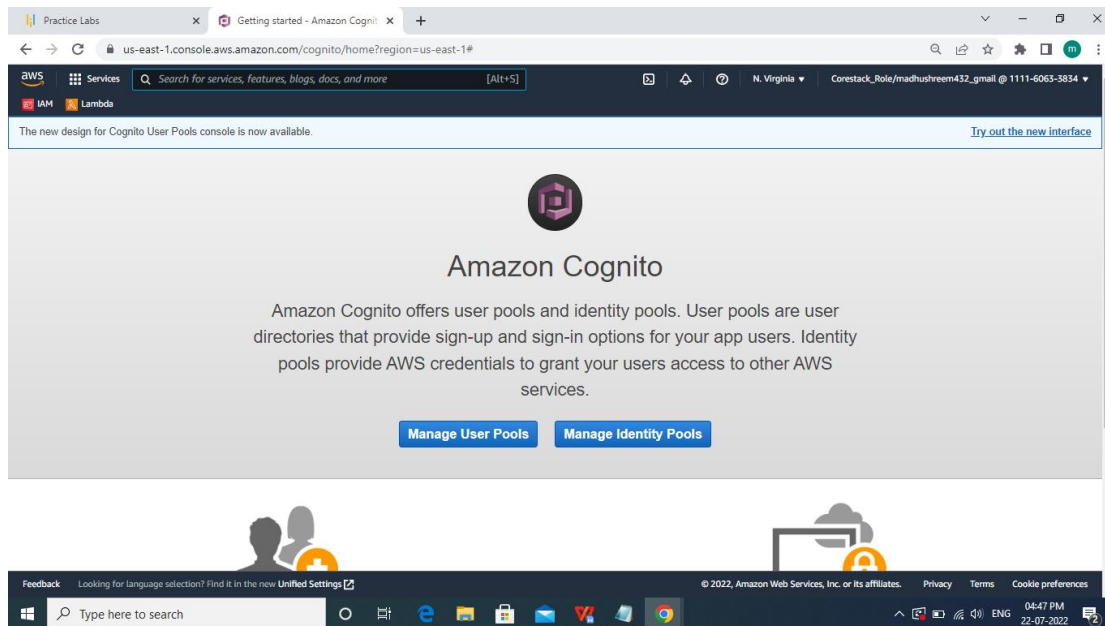
Step2: Enter the Table name as 'survey', Partition key as 'email' and the Sort key as 'city'. Click on 'Create'.



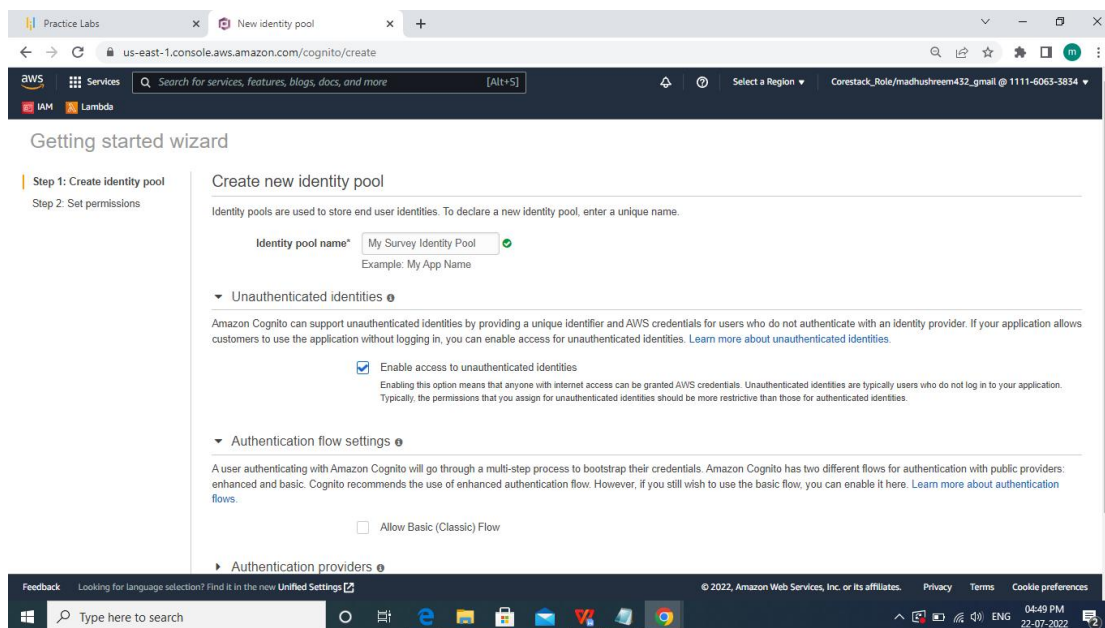
Step 3: A table would be created in DynamoDB as shown below with no items.



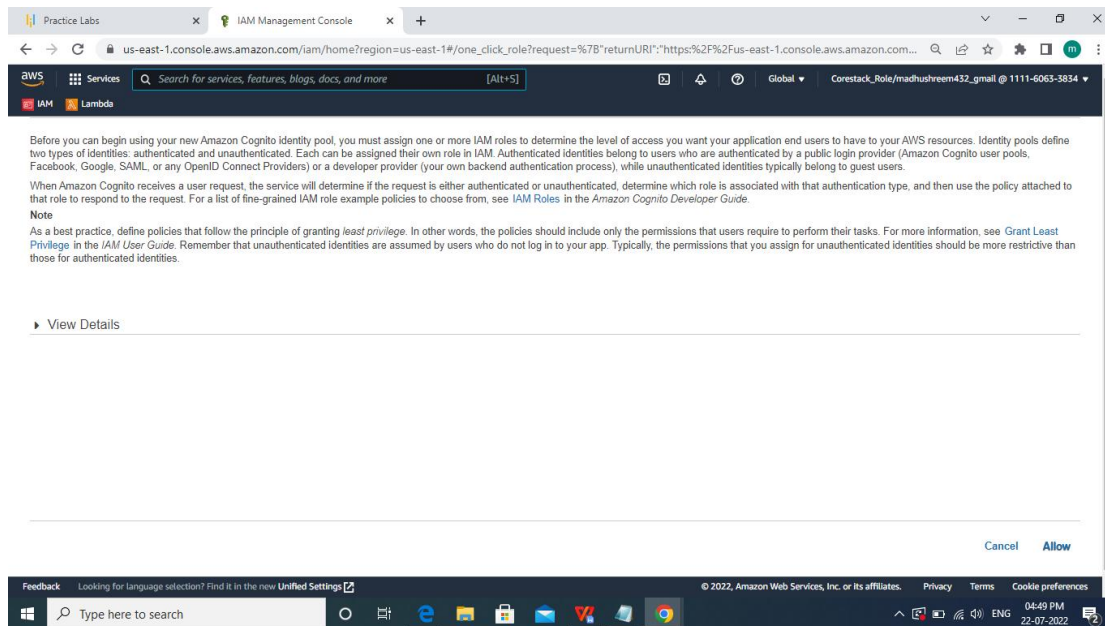
Step 4: Navigate to the 'Amazon Cognito' Management Console and click on 'Manage Identity Pools'.



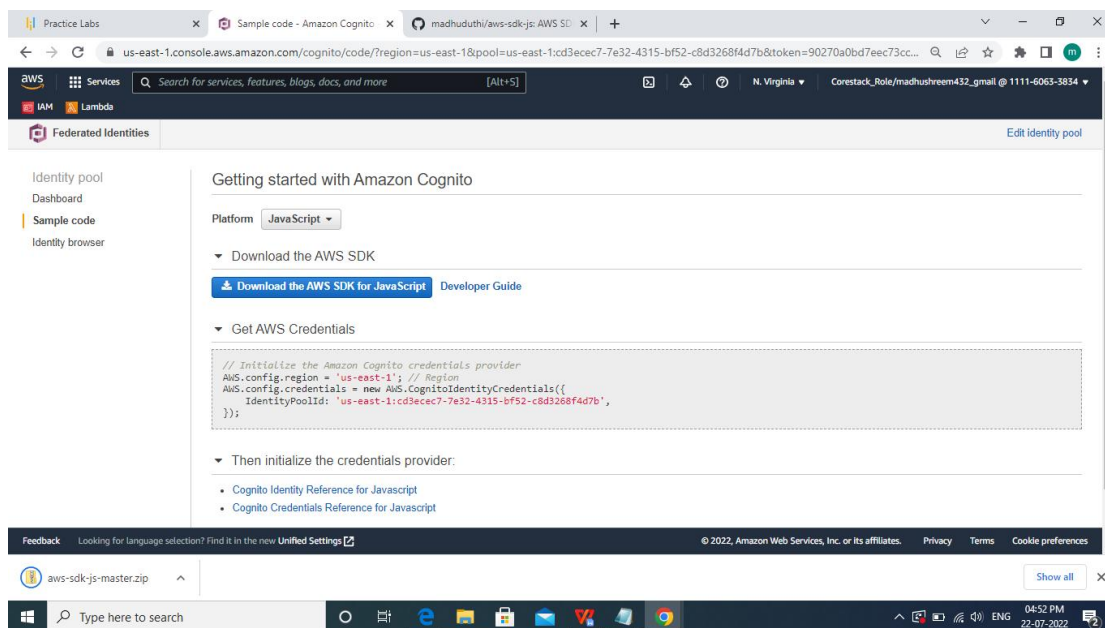
Step 5: Enter the pool name and check `Enable access to unauthorized identities` and click on `Create Pool`.



Step 6: Click on `Allow`.



Step 7: Change the platform to JavaScript, note down the `IdentityPoolId`.



IdentityPoolId: **'us-east-1:cd3ecec7-7e32-4315-bf52-c8d3268f4d7b'**  
us-east-1:cd3ecec7-7e32-4315-bf52-c8d3268f4d7b

Step 8: Navigate to the IAM Management Console and click on Roles tab. Filter for the Cognito rules and click on the Role which ends with `PoolUnauth\_Role`.

The image displays two screenshots of the AWS IAM Management Console, specifically the 'Roles' page. The first screenshot shows a list of 12 roles, including service-linked roles like 'AWSServiceRoleForAmazonElasticFileSystem'. The second screenshot shows the same page after a search for 'co' is performed, resulting in 3 matches, including 'Cognito\_MySurvey/IdentityPoolUnauth\_Role' and 'Corestack\_Role'.

**First Screenshot: Roles List**

Role name	Trusted entities	Last activity
<input type="checkbox"/> AWSServiceRoleForAmazonElasticFileSystem	AWS Service: elasticfilesystem (Service-Linked Role)	-
<input type="checkbox"/> AWSServiceRoleForAPIGateway	AWS Service: ops.apigateway (Service-Linked Role)	-
<input type="checkbox"/> AWSServiceRoleForBackup	AWS Service: backup (Service-Linked Role)	5 hours ago
<input type="checkbox"/> AWSServiceRoleForCloudTrail	AWS Service: cloudtrail (Service-Linked Role)	-
<input type="checkbox"/> AWSServiceRoleForEC2Spot	AWS Service: spot (Service-Linked Role)	-

**Second Screenshot: Roles Search Results**

Search: co (3 matches)

Role name	Trusted entities	Last activity
<input type="checkbox"/> Cognito_MySurvey/IdentityPoolAuth_Role	Identity Provider: cognito-identity.amazonaws.com	-
<input checked="" type="checkbox"/> Cognito_MySurvey/IdentityPoolUnauth_Role	Identity Provider: cognito-identity.amazonaws.com	-
<input type="checkbox"/> Corestack_Role	Account: 111160633834	15 minutes ago

Step 9: Click on 'Attach policies'.

Practice Labs x IAM Management Console x IAM Management Console x madhuduthi/aws-sdk-js AWS S3 x +

us-east-1.console.aws.amazon.com/iamv2/home#/roles/create?step=selectEntities

Step 3  
Name, review, and create

☒ AWS service  
Allow AWS services like EC2, Lambda, or others to perform actions in this account.

☐ AWS account  
Allow entities in other AWS accounts belonging to you or a 3rd party to perform actions in this account.

☐ Web identity  
Allows users federated by the specified external web identity provider to assume this role to perform actions in this account.

☐ SAML 2.0 federation  
Allow users federated with SAML 2.0 from a corporate directory to perform actions in this account.

☐ Custom trust policy  
Create a custom trust policy to enable others to perform actions in this account.

**Use case**  
Allow an AWS service like EC2, Lambda, or others to perform actions in this account.

**Common use cases**

☐ EC2  
Allows EC2 instances to call AWS services on your behalf.

☒ Lambda  
Allows Lambda functions to call AWS services on your behalf.

Use cases for other AWS services:

Cancel Next

Feedback Looking for language selection? Find it in the new Unified Settings

aws-sdk-js-master.zip Show all

Type here to search

05:16 PM 22-07-2022

Practice Labs x IAM Management Console x IAM Management Console x IAM Management Console x IAM Management Console x madhuduthi/aws-sdk-js AWS S3 x +

us-east-1.console.aws.amazon.com/iamv2/home#/roles/details/Cognito\_MySurveyIdentityPoolUnauth\_Role?section=permissions

Permissions Policies Trust relationships Tags Access Advisor Review sessions

**Identity and Access Management (IAM)**

Unable to load search  
Dashboard

**Access management**

User groups

Users

**Roles**

Policies

Identity providers

Account settings

**Access reports**

Access analyzer

Archive rules

Analysts

Settings

Credential report

Organization activity

**Permissions policies (Selected 1/1)**  
You can attach up to 10 managed policies.

< 1 >

<input checked="" type="checkbox"/>	Policy name	Type	Description
<input checked="" type="checkbox"/>	oneClick_Cognito_MySurveyIdentityPoolUnauth_Role_1658488774482	Customer inline	

**Permissions boundary - (not set)**  
Set a permissions boundary to control the maximum permissions this role can have. This is not a common setting but can be used to delegate permission management to others.

Set permissions boundary

Feedback Looking for language selection? Find it in the new Unified Settings

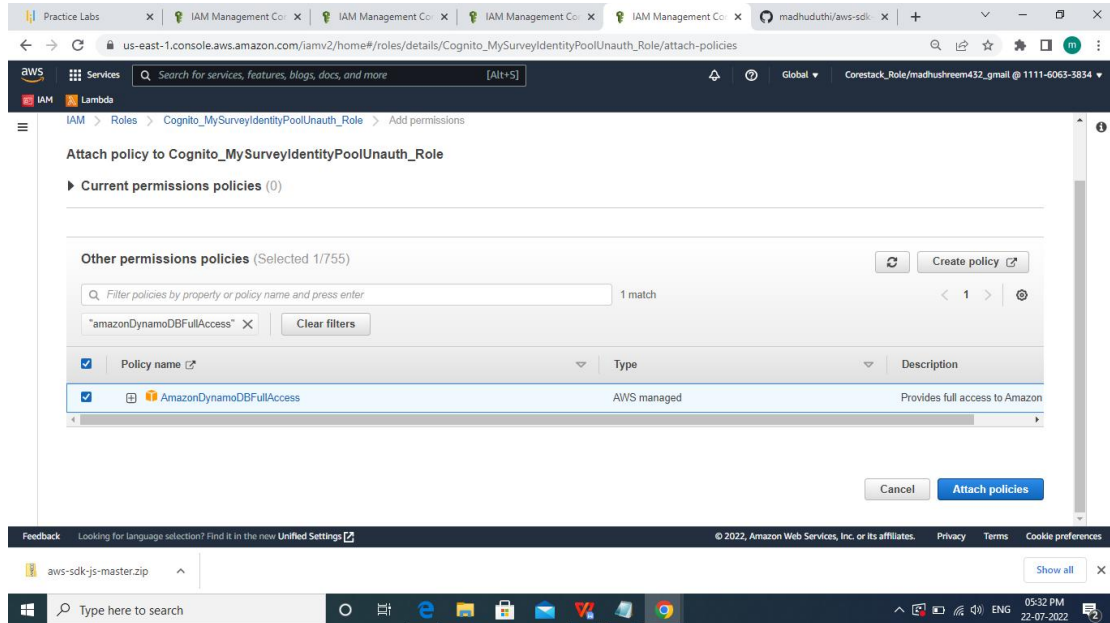
aws-sdk-js-master.zip Show all

Type here to search

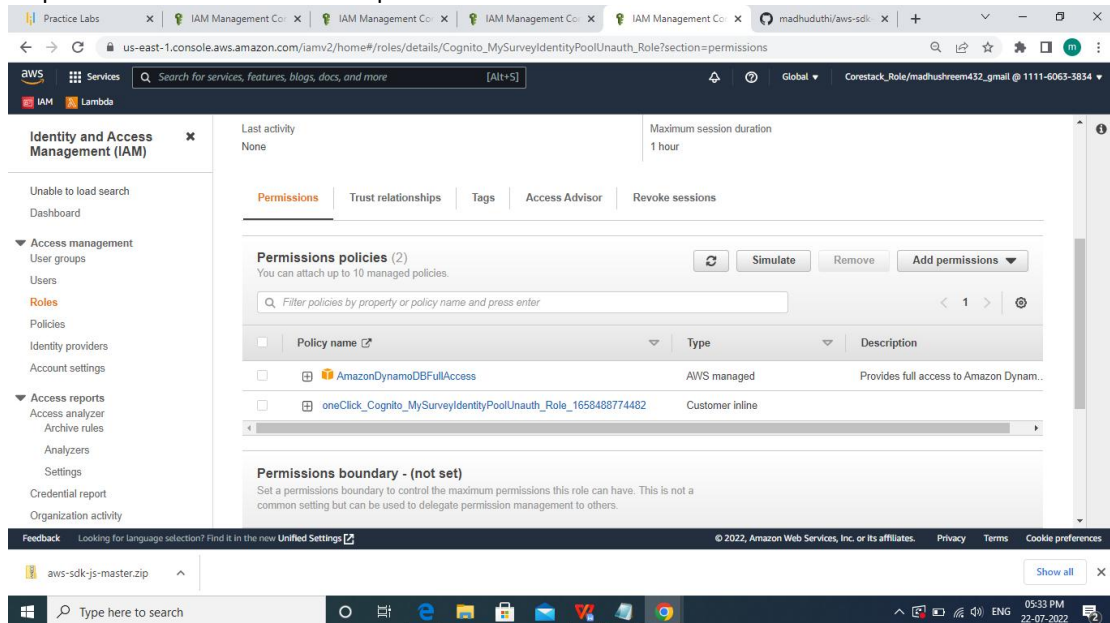
05:29 PM 22-07-2022



Step 10: Select the `AmazonDynamoDBFullAccess` Policy and click on `Attach policy`.



Step 11: The Role would have the policies attached as shown below.



arn:aws:iam::111160633834:role/Cognito\_MySurveyIdentityPoolUnauth\_Role

Step12: Navigate to S3 Management Console and create a Bucket

Practice Labs x IAM Management Co x IAM Management Co x IAM Management Co x S3 Management Con x madhuduthi/aws-sdk x +

s3.console.aws.amazon.com/s3/get-started?region=ap-south-1

Services Search for services, features, blogs, docs, and more [Alt+S] Global Corestack\_Role/madhushreem432\_gmail @ 1111-6063-3834 IAM Lambda

# Storage

## Amazon S3

Store and retrieve any amount of data from anywhere

Amazon S3 is an object storage service that offers industry-leading scalability, data availability, security, and performance.

### Create a bucket

Every object in S3 is stored in a bucket. To upload files and folders to S3, you'll need to create a bucket where the objects will be stored.

Create bucket

### Pricing

With S3, there are no minimum fees. You only pay for what you use. Prices are based on the location of your S3 bucket.

Estimate your monthly bill using the [AWS Simple Monthly](#)

### How it works

aws Introduction to Amazon S3 Copy link

Feedback Looking for language selection? Find it in the new [Unified Settings](#)

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Practice Labs x IAM Management Co x IAM Management Co x IAM Management Co x S3 bucket x madhuduthi/aws-sdk x +

s3.console.aws.amazon.com/s3/bucket/create?region=us-east-1

Services Search for services, features, blogs, docs, and more [Alt+S] Global Corestack\_Role/madhushreem432\_gmail @ 1111-6063-3834 IAM Lambda

## Create bucket

Buckets are containers for data stored in S3. [Learn more](#)

### General configuration

Bucket name

survey-website

Bucket name must be unique and must not contain spaces or uppercase letters. See [rules for bucket naming](#)

AWS Region

US East (N. Virginia) us-east-1

Copy settings from existing bucket - *optional*

Only the bucket settings in the following configuration are copied.

Choose bucket

Feedback Looking for language selection? Find it in the new [Unified Settings](#)

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aws-sdk-js-master.zip Show all

Type here to search

05:56 PM 22-07-2022

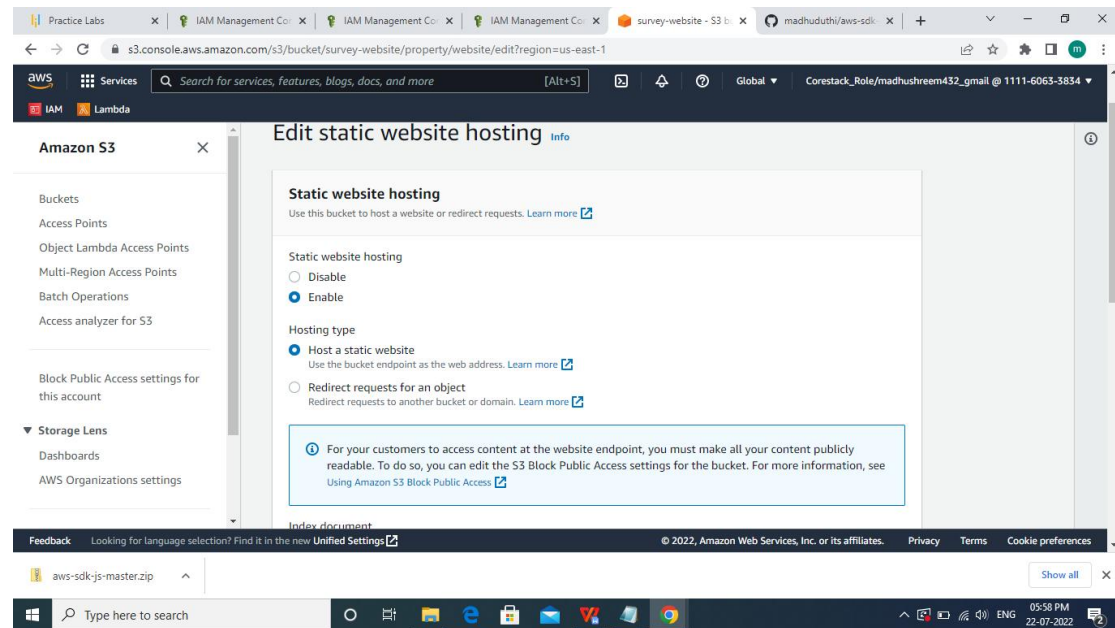


The screenshot shows the AWS S3 console interface. A green banner at the top indicates that the bucket "survey-website" was successfully created. Below this, the "Account snapshot" section shows the bucket's details: Total storage is 411.0 B, Object count is 1, and Avg. object size is 411.0 B. The bucket is located in the US East (N. Virginia) region (us-east-1) and its access is set to "Objects can be public". The creation date is July 22, 2022, at 17:57:05 (UTC+05:30). The left sidebar shows the "Amazon S3" navigation menu with options like Buckets, Access Points, and Storage Lens. The bottom of the screen shows the Windows taskbar with the time 05:57 PM on 22-07-2022.

Step 13: Go to the `Properties` tab.

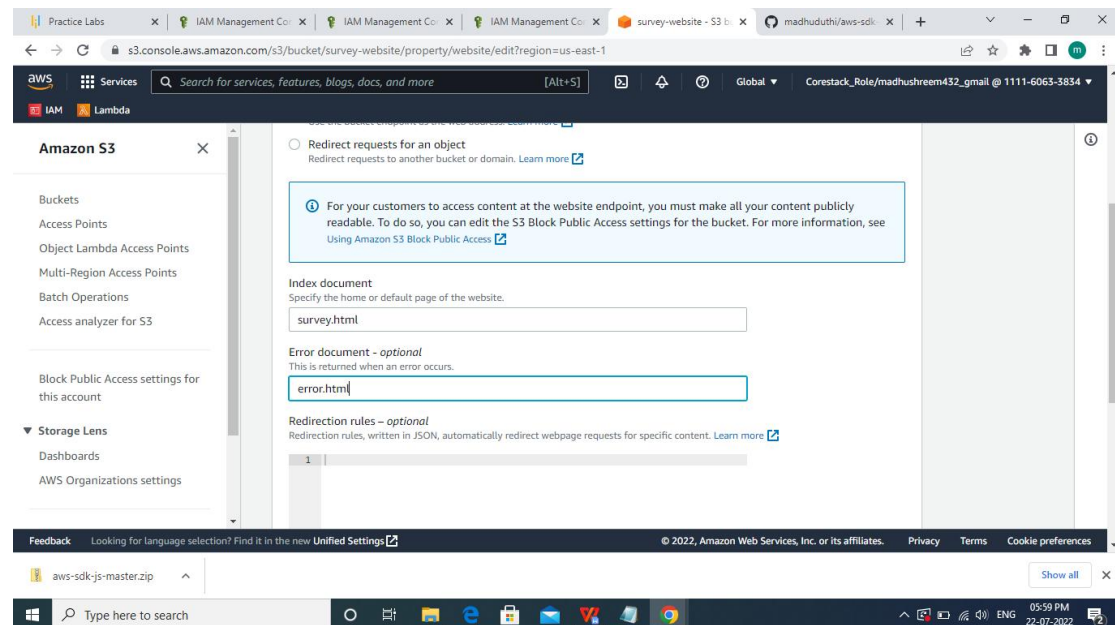
The screenshot shows the AWS S3 console interface with the "survey-website" bucket selected. The "Properties" tab is active, displaying the "Objects (0)" section. The text explains that objects are the fundamental entities stored in Amazon S3 and that users can use Amazon S3 Inventory to get a list of all objects in their bucket. The "Objects (0)" section includes buttons for "Copy S3 URI", "Copy URL", "Download", "Open", "Delete", and "Actions". There are also buttons for "Create folder" and "Upload". The bottom of the screen shows the Windows taskbar with the time 05:57 PM on 22-07-2022.

Step 14: Towards the end of the page click on Edit for 'Static website hosting'.

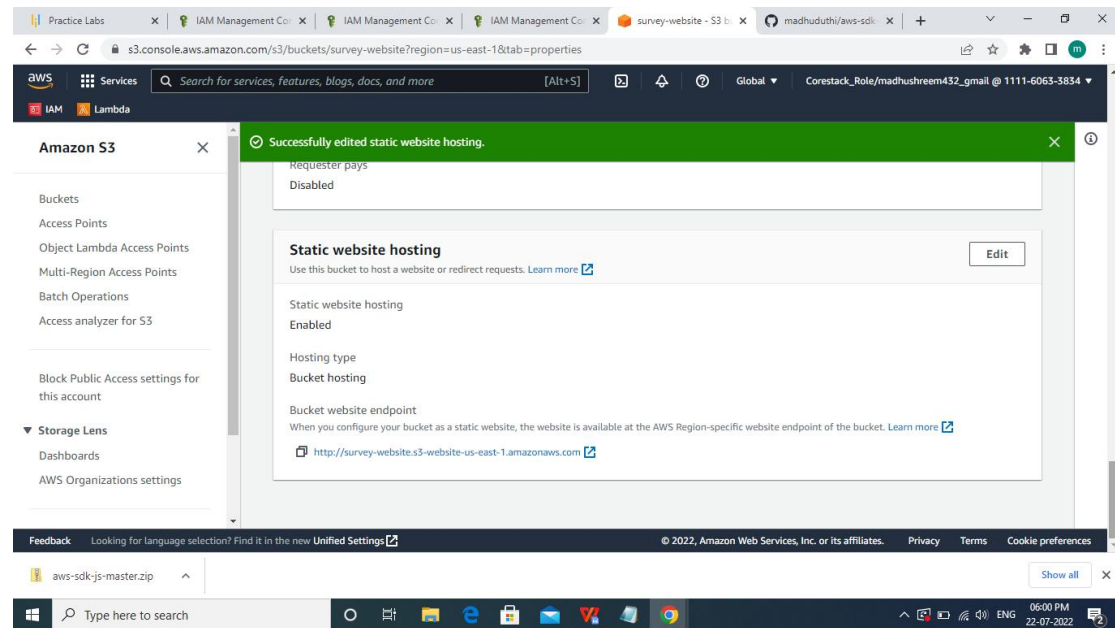


Step 15: Select Enable for 'Static website hosting'. For the 'Index document' enter 'survey.html' and for the Error document enter 'error.html'.

Step 16: Click on 'Save changes'.



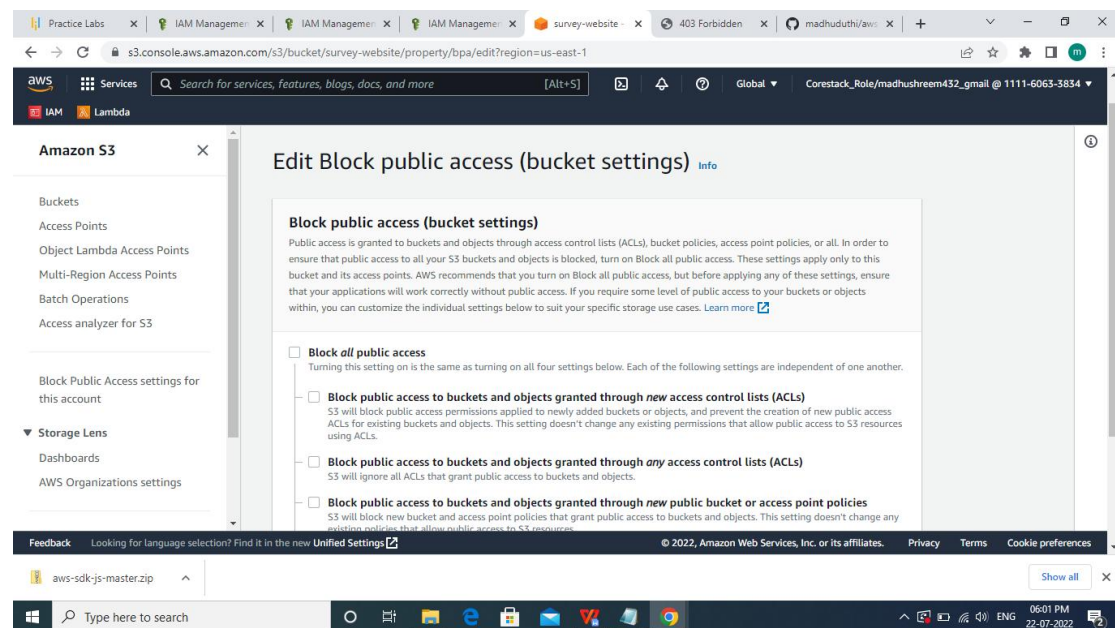
Step 17: Note down the URL at the end. We would be using this to access the web pages in S3 via the browser later.

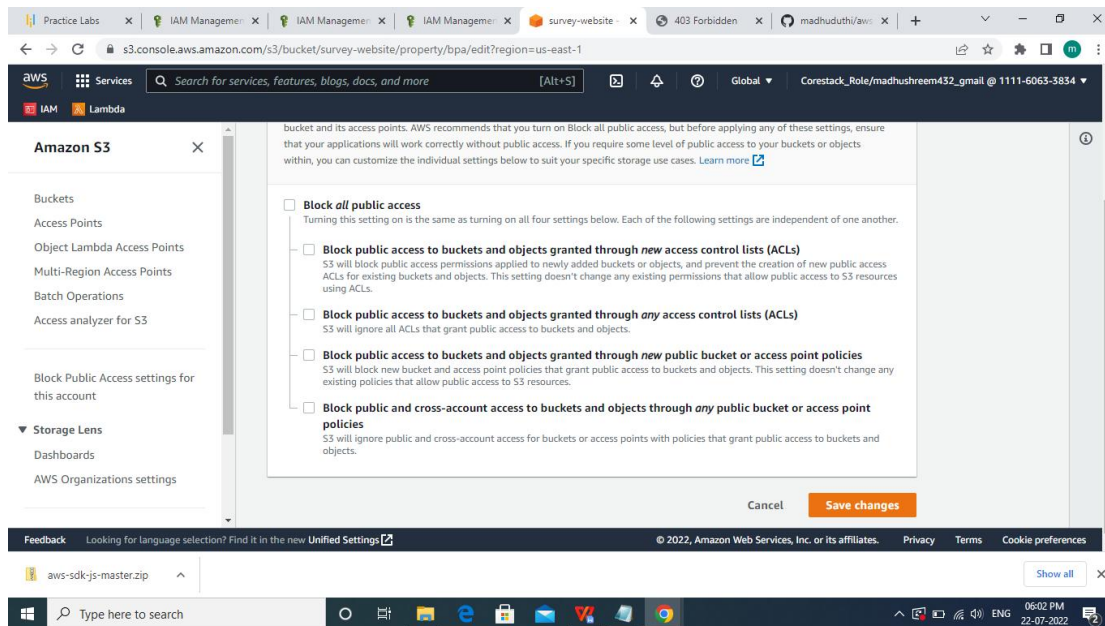


<http://survey-website-s3-website-us-east-1.amazonaws.com>

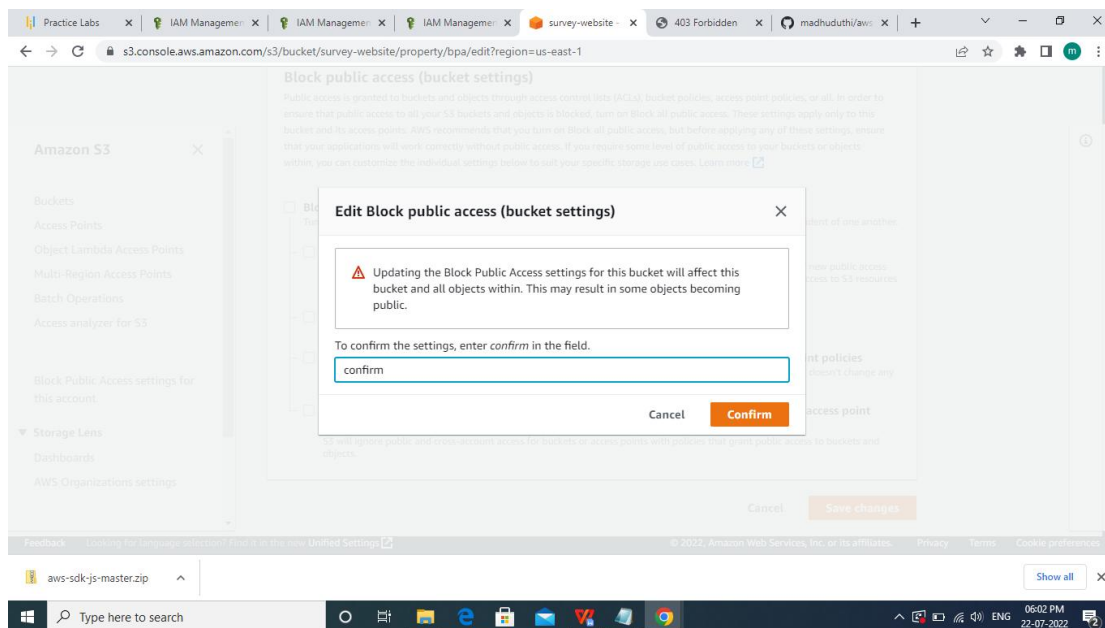
Step 18: Go to the 'Permissions' tab. Click on Edit for Block public access (bucket settings).

Step 19: Uncheck all the options as shown below and click on 'Save changes'.

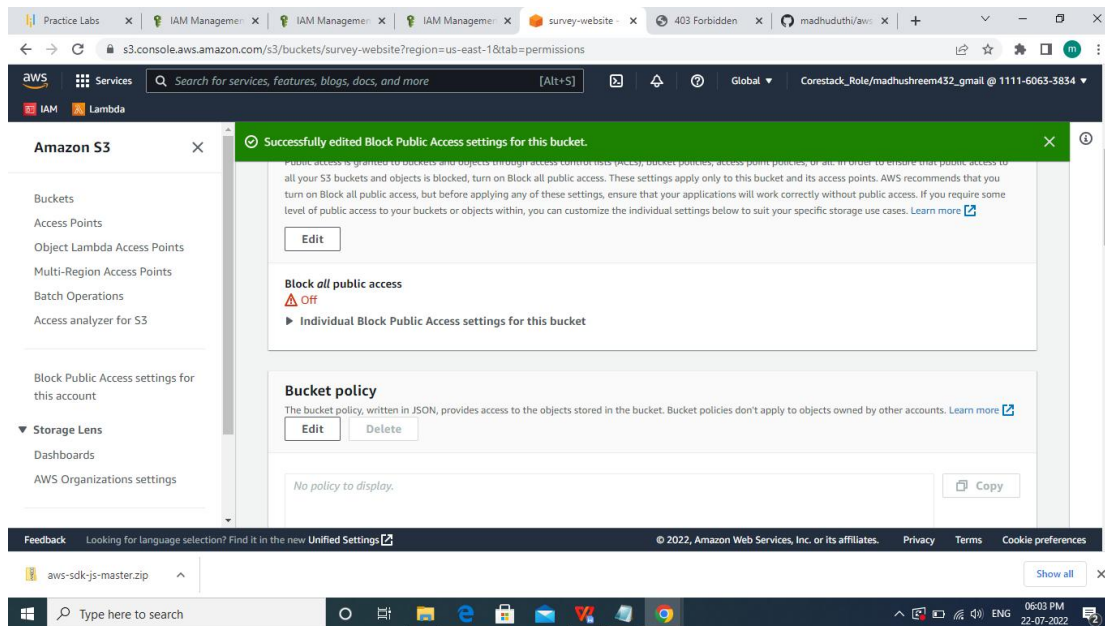




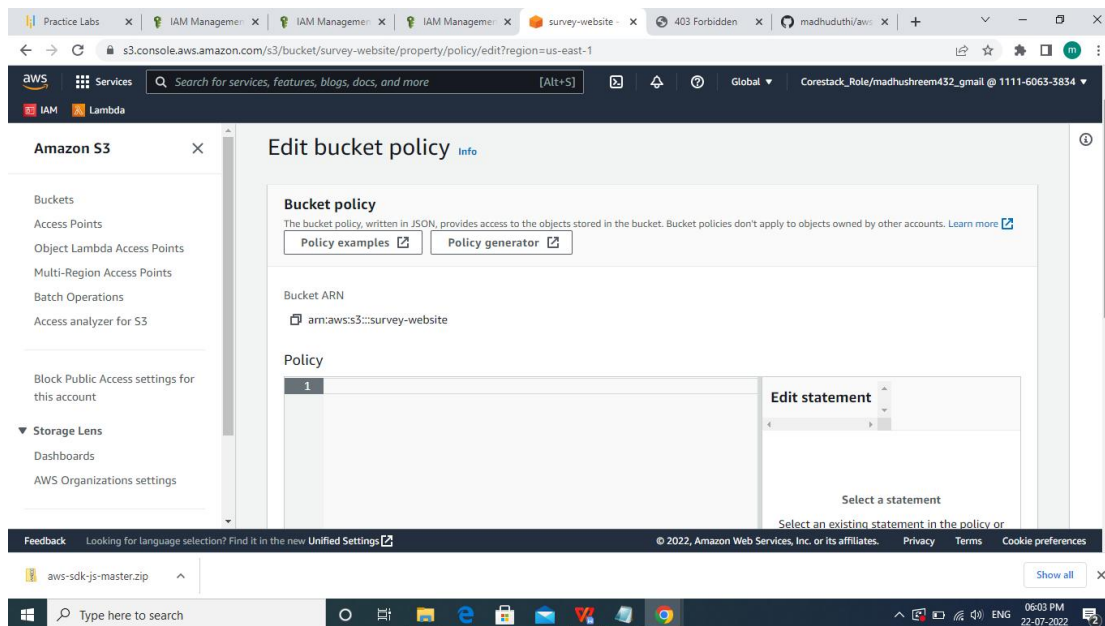
Step 20: Enter `confirm` for the sake of confirmation.



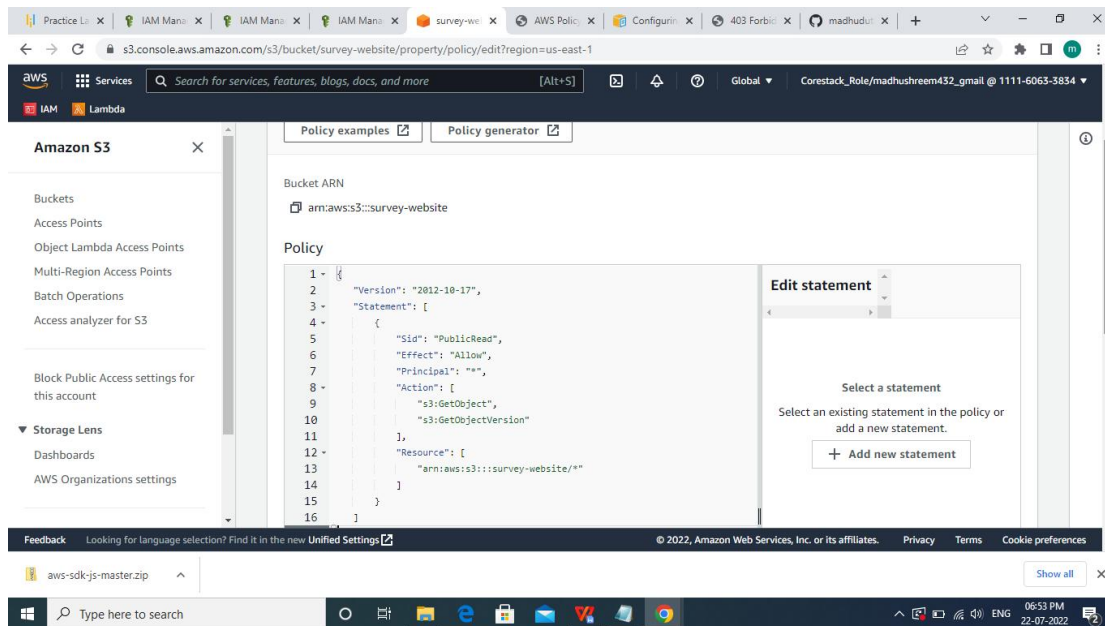
Step 21: In the same page, click on Edit for the `Bucket policy`.



Step 22: Enter the JSON from the attached file into the policy. Make sure to replace the S3 bucket name with the bucket name created in one of the previous step.  
 bucket-policy.json

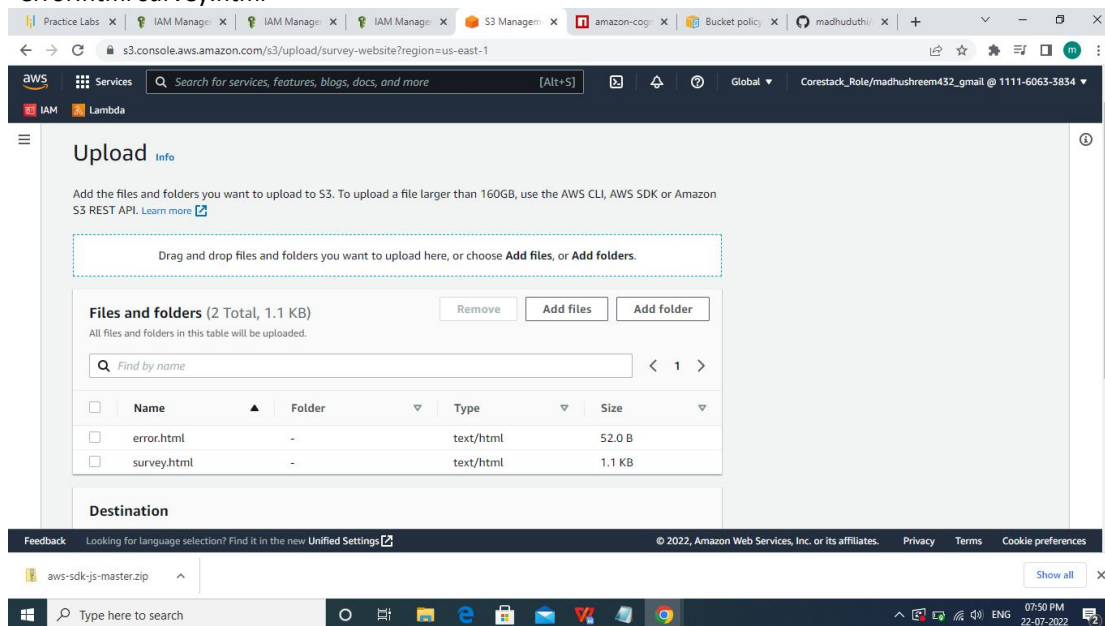






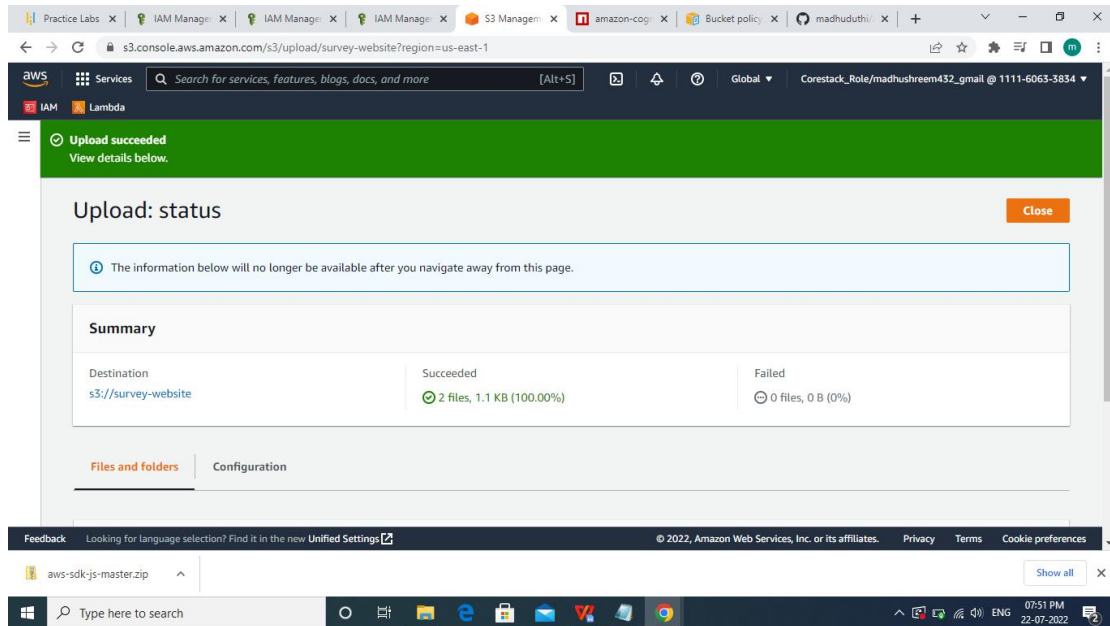
Step 23: Click on the Objects tab. Upload the survey.html and the error.html to the S3 bucket. Make sure the `IdentityPoolId` is modified in the survey.html. Use the one got from the Cognito Console while creating the Identity pool.

error.html survey.html

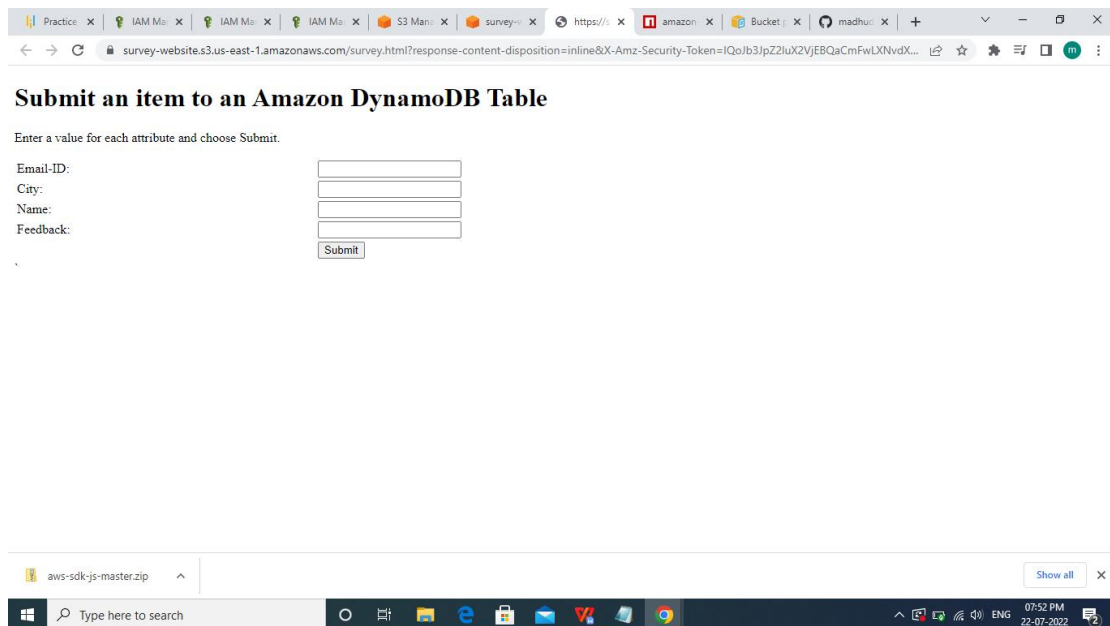


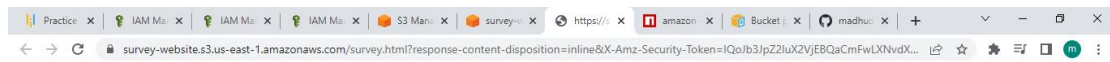
Step 24: Use the browser and navigate to the URL which was got from the S3 Management Console. Enter the email, City and feedback. Click on Submit.





Step 24: Use the browser and navigate to the URL which was got from the S3 Management Console. Enter the email, City and feedback. Click on Submit.





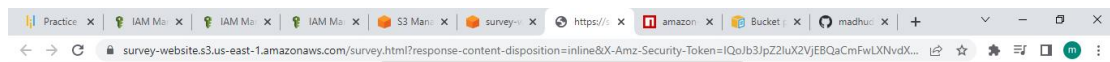
## Submit an item to an Amazon DynamoDB Table

Enter a value for each attribute and choose Submit.

Email-ID:	<input type="text" value="madhushreem432@gmail.cc"/>
City:	<input type="text" value="Bangalore"/>
Name:	<input type="text" value="madhu"/>
Feedback:	<input type="text" value="Good work"/>
	<input type="button" value="Submit"/>



Step 25: If everything works fine, then the message `Thanks for helping with the survey` should be displayed.



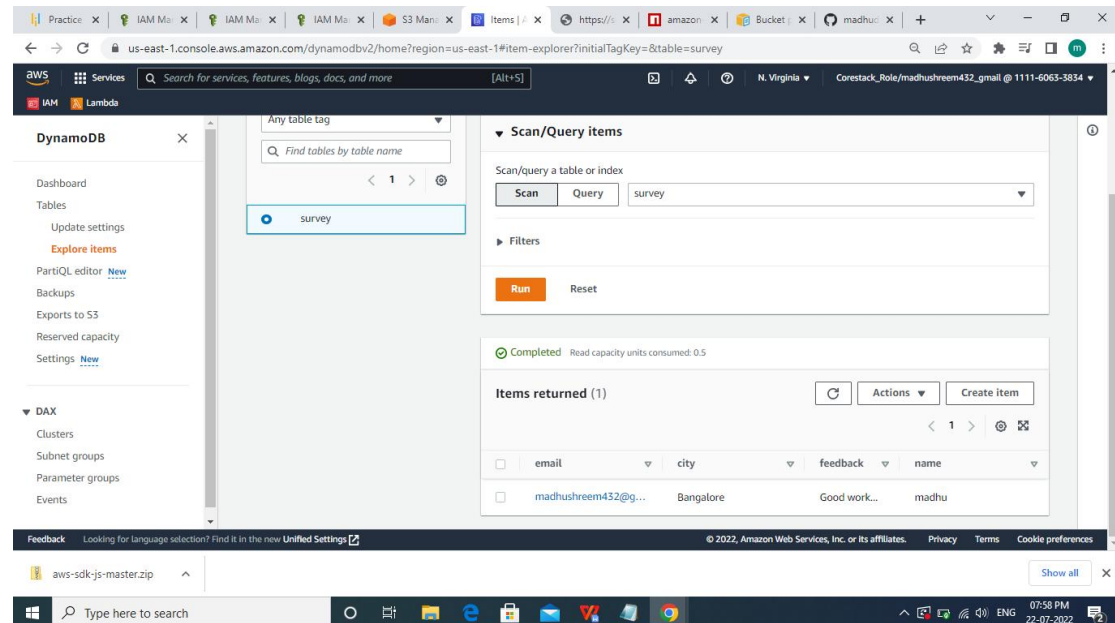
## Submit an item to an Amazon Dy

Enter a value for each attribute and choose Submit.

Email-ID:	<input type="text" value="madhushreem432@gmail.cc"/>
City:	<input type="text" value="Bangalore"/>
Name:	<input type="text" value="madhu"/>
Feedback:	<input type="text" value="Good work..."/>
	<input type="button" value="Submit"/>



Step 26: Navigate to the DynamoDB Management Console and check for the new Item under the Items tab as shown below. If for some reason the Item doesn't appear click on the Refresh button. The survey which we have entered in the feedback form should appear in the DynamoDB for further processing.



## Conclusion

We have observed how to use the Serverless technologies to create a feedback form, storing the results in DynamoDB for further analysis.