

The screenshot shows a web browser window with the address bar displaying "projectbookreserve.s3-website-ca-central-1.amazonaws.com". The page has a teal header with the text "BOOK A RESOURCE". The main content area has a solid blue background. In the center, there is a white login form titled "Login". The form contains the following elements: an email input field with an envelope icon and the placeholder text "Enter your email"; a password input field with a lock icon, the placeholder text "Enter your password", and a toggle icon; a checkbox labeled "Remember me"; a link labeled "Forgot password?"; a blue "Login" button; and a link at the bottom that says "Not a member? Signup Now".

If not registered user, you can register yourself by clicking Signup Now. Once you click Signup after entering details you redirect back to login page where you can login.

The screenshot shows the same web browser window as the login page. The registration form is titled "Registration". It contains the following elements: a name input field with a person icon and the placeholder text "Enter your name"; an email input field with an envelope icon and the placeholder text "Enter your email"; a password input field with a lock icon and the placeholder text "Create a password"; a confirm password input field with a lock icon, the placeholder text "Confirm a password", and a toggle icon; a checkbox labeled "I accepted all terms and conditions"; a blue "Signup" button; and a link at the bottom that says "Already a member? Login Now".

Once you login below page is displayed. This page is used to search for book by its Bookid in the library.

BOOK A RESOURCE

[Search Book](#)

[Add New Book](#)

[Issue Book](#)

Search Key(BookId):

Book Name:

Author Name:

Genre:

Enter 1001 and click GetBookDetails. You see book details are populated as shown below

BOOK A RESOURCE

[Search Book](#)

[Add New Book](#)

[Issue Book](#)

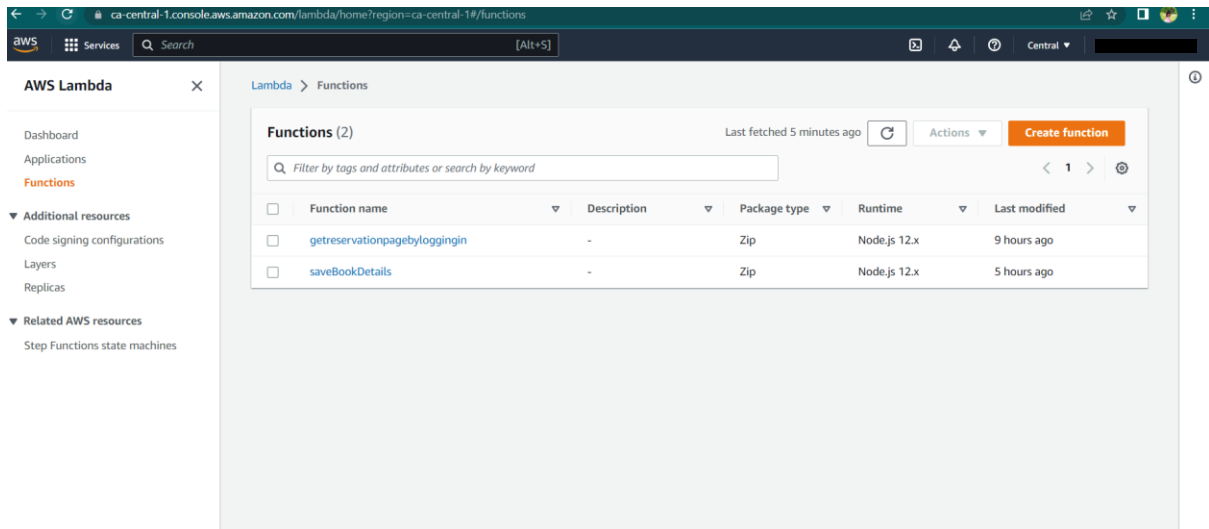
Search Key(BookId):

Book Name:

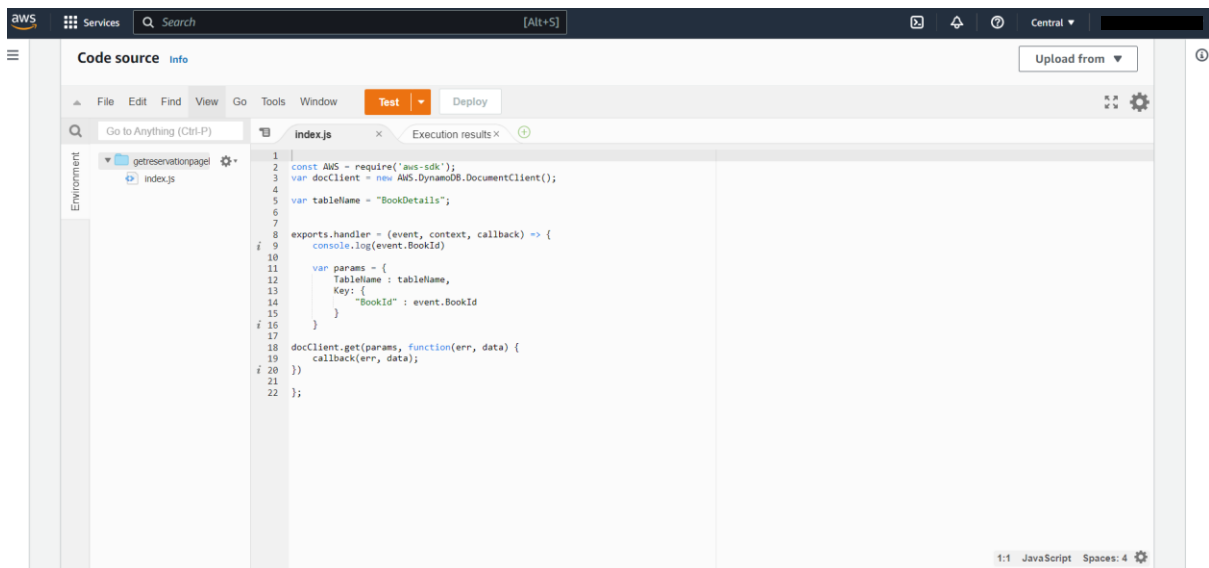
Author Name:

Genre:

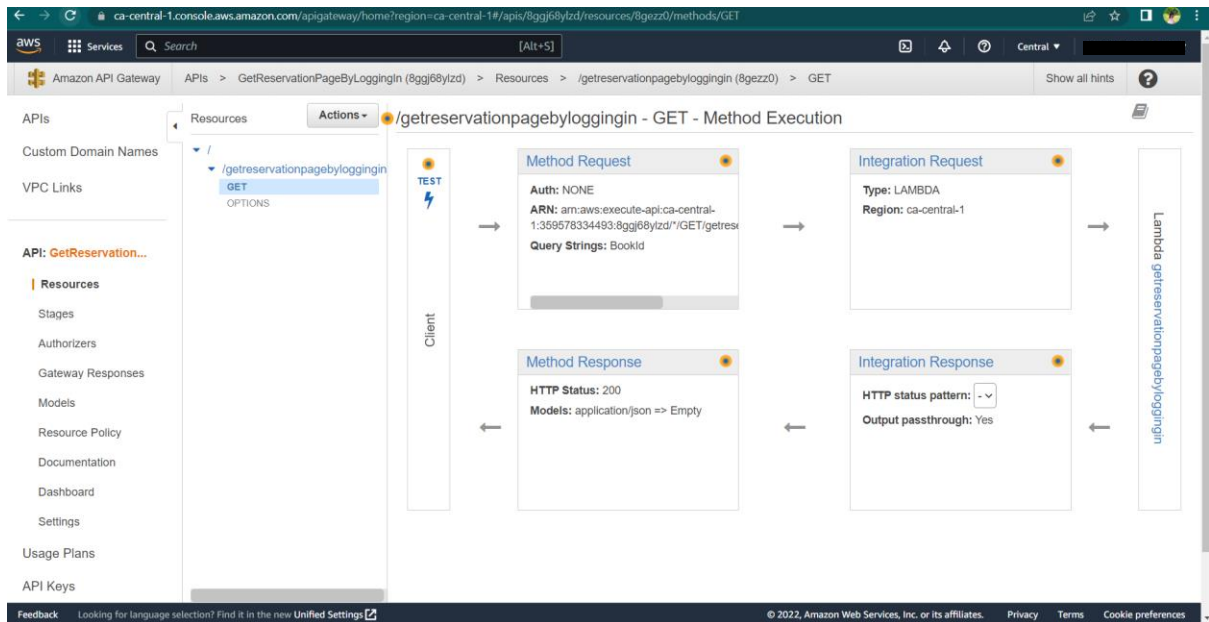
Below is the lambda function `getreservationpagebyloggingin` created for searching book in the library DB Book Details



Below is the lambda function in Node js for book search functionality



Below is the GET REST API method created for book search



below is the dynamo DB data from where the 1001 book details are displayed.

The screenshot shows the AWS DynamoDB console for the 'ca-central-1' region. The breadcrumb trail is: **DynamoDB** > **Items** > **BookDetails**. The left sidebar shows the navigation menu with options like **Dashboard**, **Tables**, **Update settings**, **Explore items**, **PartiQL editor**, **Backups**, **Exports to S3**, **Imports from S3**, **Reserved capacity**, and **Settings**. The main content area is titled **BookDetails** and includes an **Autopreview** button and a **View table details** button. The **Scan/Query items** section shows a **Completed** status with **Read capacity units consumed: 0.5**. The **Items returned (3)** section displays a table with the following data:

	BookId	BookAuthor	BookName	Genre
<input type="checkbox"/>	1002	Chetan Bhagat	2 States	Novel,Fiction
<input type="checkbox"/>	1001	Chetan Bhagat	Half Girlfrie...	Fiction,Romance
<input type="checkbox"/>	1003	Rehman	Cloud Com...	Network

Next functionality is registering a new book into library. Add new book is the page for the this.

BOOK A RESOURCE

[Search Book](#)

[Add New Book](#)

[Issue Book](#)

BookId:

BookName:

BookAuthor:

Genre:

You need to enter the details in the below fields and click Save

BOOK A RESOURCE

[Search Book](#)

[Add New Book](#)

[Issue Book](#)

BookId:

BookName:

BookAuthor:

Genre:

A message pops up that data is successfully saved into the dynamo table.

BOOK A RESOURCE

[Search Book](#)

[Add New Book](#)

[Issue Book](#)

BookId:

BookName:

BookAuthor:

Genre:

Successfully updated data

This can be verified by checking dynamo DB and you can see the table is updated with given details

DynamoDB

Tables (1)

Any table tag

Find tables by table name

BookDetails

BookDetails

Autopreview View table details

Scan/Query items

Expand to query or scan items.

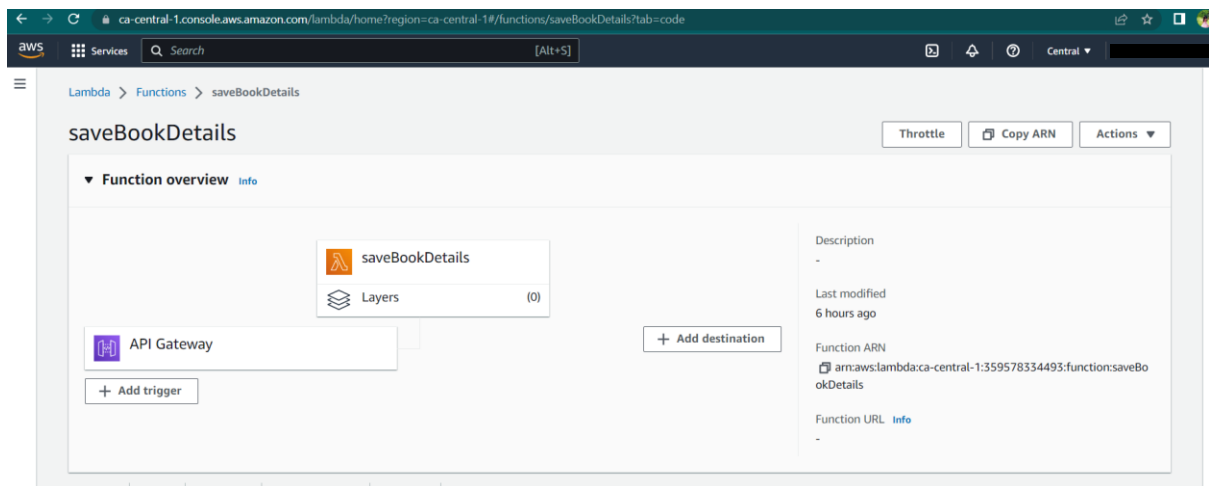
Completed Read capacity units consumed: 0.5

Items returned (4)

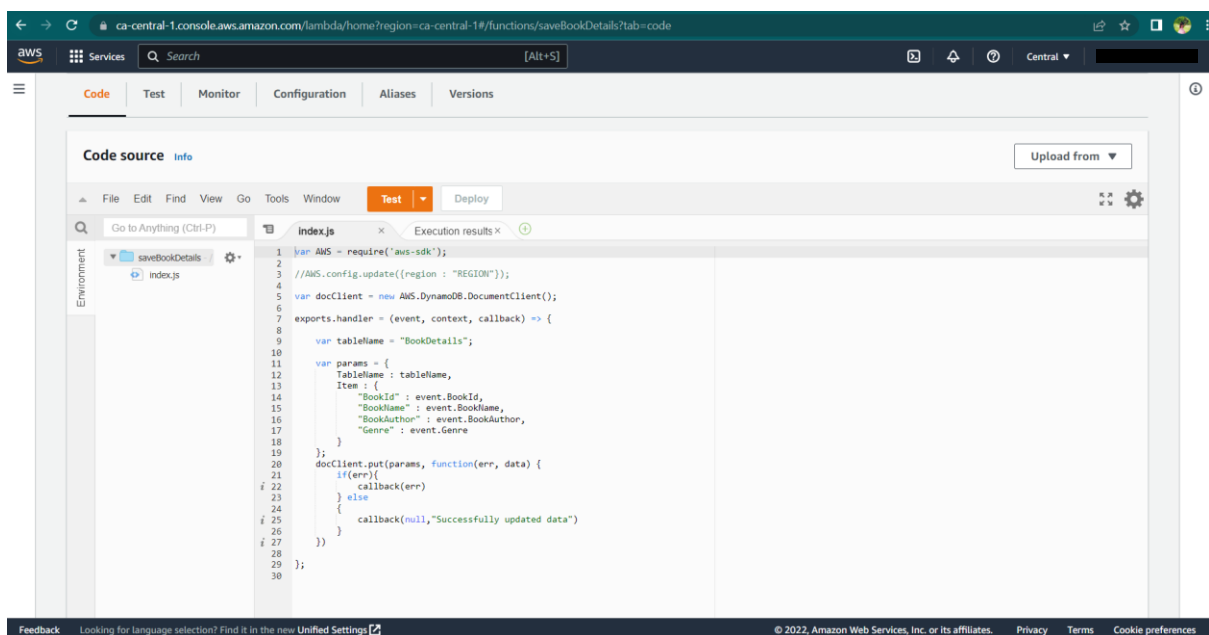
Actions Create item

BookId	BookAuthor	BookName	Genre
1004	James Clear	Atomic Habits	Self-help
1002	Chetan Bhagat	2 States	Novel,Fiction
1001	Chetan Bhagat	Half Girlfrie...	Fiction,Romance
1003	Rehman	Cloud Com...	Network

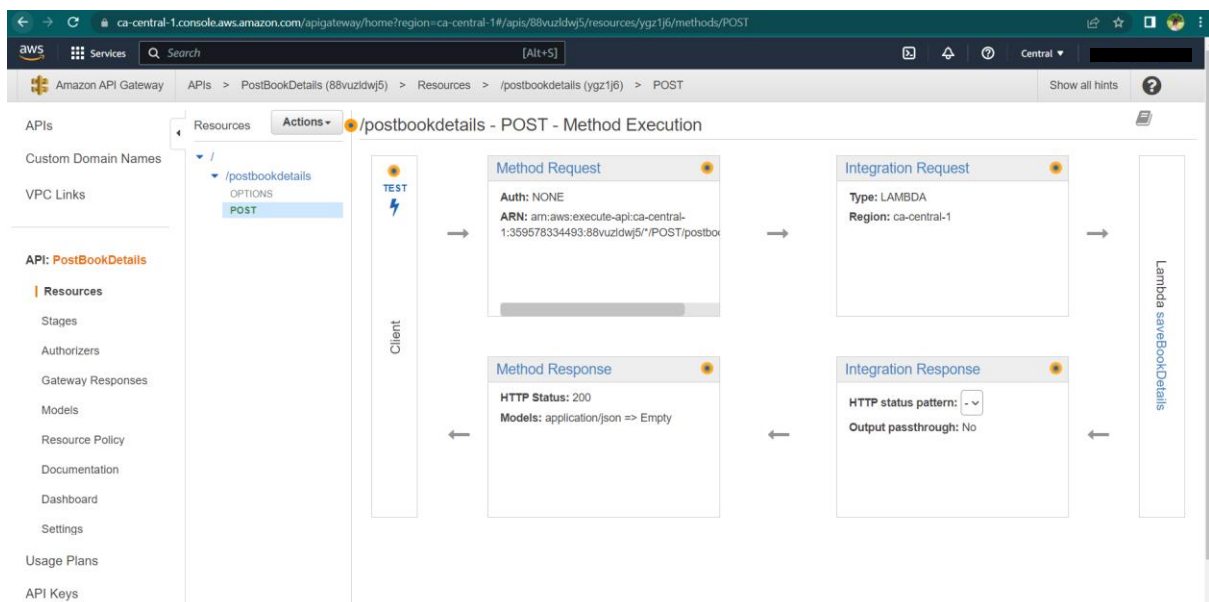
Below is the Lambda function for the registering new book



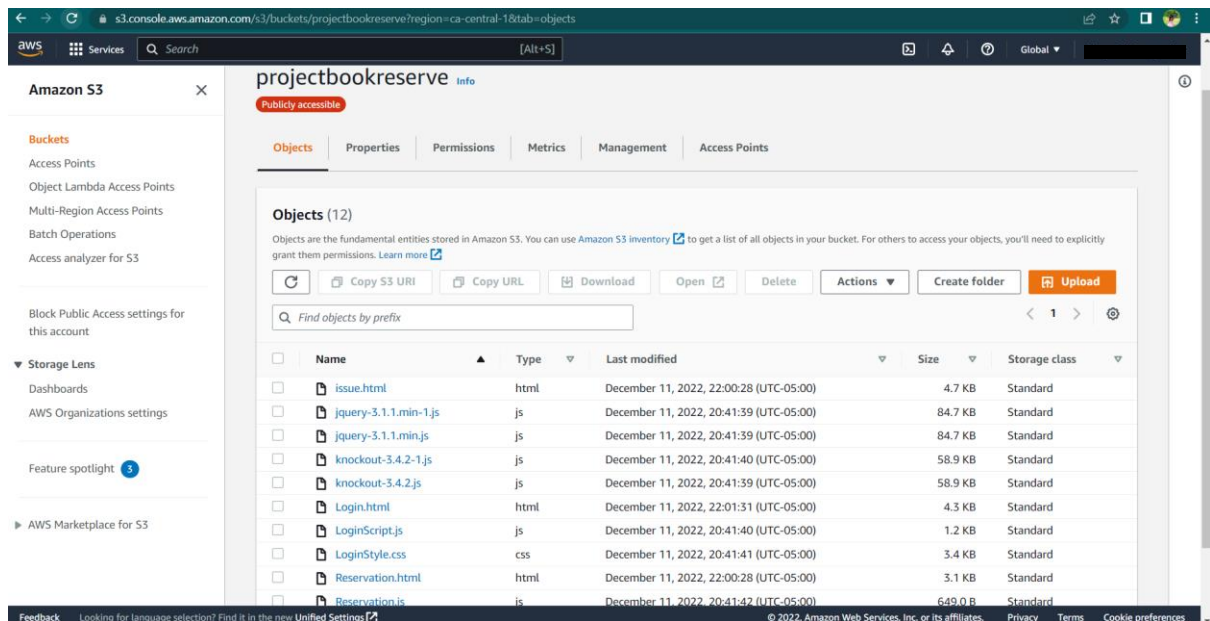
Here is the source code for it in Node JS



Below is the POST API Gateway method for registering new book into library



Amazon S3 bucket created, and files are uploaded to it as below. And also created a bucket policy and hosted the static website



Below are the IAM roles created for both GET and POST lambda functions

