Cloud Project 3

This document contains the list of API Gateway URLs corresponding to the Lambda functions deployed for the project. These URLs allow interaction with an Amazon RDS database through RESTful endpoints, enabling CRUD operations on categories and books.

Each Lambda function performs a specific operation such as fetching, adding, or querying data based on the provided input parameters. The endpoints are designed to work with HTTP methods (GET and POST) and return responses in JSON format.

These APIs demonstrate serverless architecture using AWS Lambda, API Gateway, and RDS, showcasing seamless integration and efficient backend processing for database operations.

Endpoints:

1. GET **/getAllCategory**
   Description: Fetches all categories from the database.

   https://h3nwug44z8.execute-api.us-east-2.amazonaws.com/default/getAllCategory

   Example execution:
   CURL:
   curl -X GET "https://h3nwug44z8.execute-api.us-east-2.amazonaws.com/default/getAllCategory"

2. GET **/getCategoryName**
   Description: Fetches the name of a category using its ID.

   https://h3nwug44z8.execute-api.us-east-2.amazonaws.com/default/getCategoryName/{category_id}

   Example execution:
   URL:
   https://h3nwug44z8.execute-api.us-east-2.amazonaws.com/default/getCategoryName/1001

   CURL:
   curl -X GET "https://h3nwug44z8.execute-api.us-east-2.amazonaws.com/default/getCategoryName/1003"

3. GET **/getCategoryId**
   Description: Fetches the ID of a category using its name.

   https://h3nwug44z8.execute-api.us-east-2.amazonaws.com/default/getCategoryId/{name}

   Example execution:
   URL:
   https://h3nwug44z8.execute-api.us-east-2.amazonaws.com/default/getCategoryId/Fantasy

   CURL:
   curl -X GET "https://h3nwug44z8.execute-api.us-east-2.amazonaws.com/default/getCategoryId/Classics"

4. POST **/addCategory**
   Description: Adds a new category to the database.

   https://h3nwug44z8.execute-api.us-east-2.amazonaws.com/default/addCategory

   Example execution:
   CURL:
   curl -X POST "https://h3nwug44z8.execute-api.us-east-2.amazonaws.com/default/addCategory" -H "Conte
   Type: application/json" -d "{\"category_id\": \"1008\", \"name\": \"Geography\"}"

5. GET **/getAllBook**
   Description: Fetches all books from the database.

   https://h3nwug44z8.execute-api.us-east-2.amazonaws.com/default/getAllBook

   Example execution:
   URL:
   https://h3nwug44z8.execute-api.us-east-2.amazonaws.com/default/getAllBook

   CURL:
   curl -X GET "https://h3nwug44z8.execute-api.us-east-2.amazonaws.com/default/getAllBook"

6. GET **/getBookById**
   Description: Fetches details of a book by its ID.

   https://h3nwug44z8.execute-api.us-east-2.amazonaws.com/default/getBookById/{book_id}

   Example execution:
   URL:
   https://h3nwug44z8.execute-api.us-east-2.amazonaws.com/default/getBookById/1010

   CURL:
   curl -X GET "https://h3nwug44z8.execute-api.us-east-2.amazonaws.com/default/getBookById/1009"

7. POST **/addBook**
   Description: Adds a new book to the database.

   Example Execution:
   CURL:
   curl -X POST "https://h3nwug44z8.execute-api.us-east-2.amazonaws.com/default/getAllBook" \
   -H "Content-Type: application/json" \
   -d "{\"book_id\": \"1017\", \"title\": \"The Hobbit\", \"author\": \"J.R.R. Tolkien\", \"description\": \"A prelude to The Lord of the Rings\", \"price\": 19.99, \"rating\": 4.9, \"is_public\": true, \"is_featured\": false, \"category_id\": \"1002\"}"

   curl -X POST "https://h3nwug44z8.execute-api.us-east-2.amazonaws.com/default/addBook" \
   -H "Content-Type: application/json" \
   -d "{\"book_id\": \"3001\", \"title\": \"Pride and Prejudice\", \"author\": \"Jane Austen\", \"description\": \"A timeless tale of love and values\", \"price\": 14.99, \"rating\": 4.5, \"is_public\": true, \"is_featured\": false, \"category_id\": \"1001\"}"

8. GET **/getRandomBook**
   Description: Fetches 5 random books from the database.

   https://h3nwug44z8.execute-api.us-east-2.amazonaws.com/default/getRandomBook

   Example execution:
   CURL:
   curl -X GET "https://h3nwug44z8.execute-api.us-east-2.amazonaws.com/default/getRandomBook"

9. GET **/getBookByCategoryId**
   Description: Fetches all books for a specific category ID.

   https://h3nwug44z8.execute-api.us-east-2.amazonaws.com/default/getBookByCategoryId/{category_id}

   Example execution:
   URL:
   https://h3nwug44z8.execute-api.us-east-2.amazonaws.com/default/getBookByCategoryId/1004

   CURL:
   curl -X GET "https://h3nwug44z8.execute-api.us-east-2.amazonaws.com/default/getBookByCategoryId/1003

10. GET /getBookByCategoryName
    Description: Fetches all books for a specific category name.

    https://h3nwug44z8.execute-api.us-east-2.amazonaws.com/default/getBookByCategoryName/{name}

    Example execution:
    URL:
    https://h3nwug44z8.execute-api.us-east-2.amazonaws.com/default/getBookByCategoryName/Fantasy

    CURL:
    curl -X GET "https://h3nwug44z8.execute-api.us-east-2.amazonaws.com/default/getBookByCategoryName/Classics"