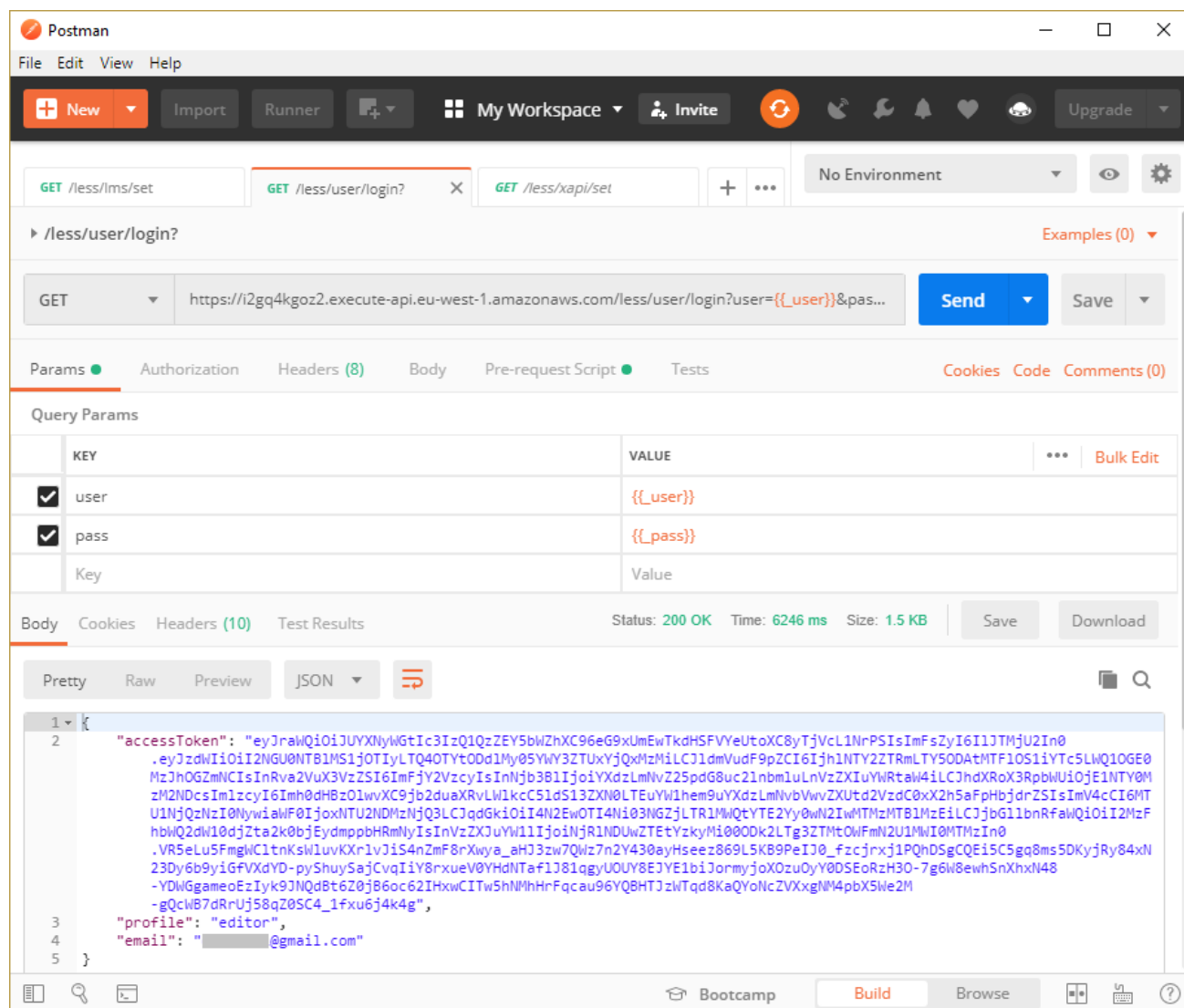


## ANEXO 5 - Pruebas unitarias funciones API Gateway + funciones Lambda + DynamoDB

Punto de entrada (API Gateway)	Tipo petición	Función Lambda	Resultado
/less/user/login	GET	userLambda	Correcto



Respuesta completa:

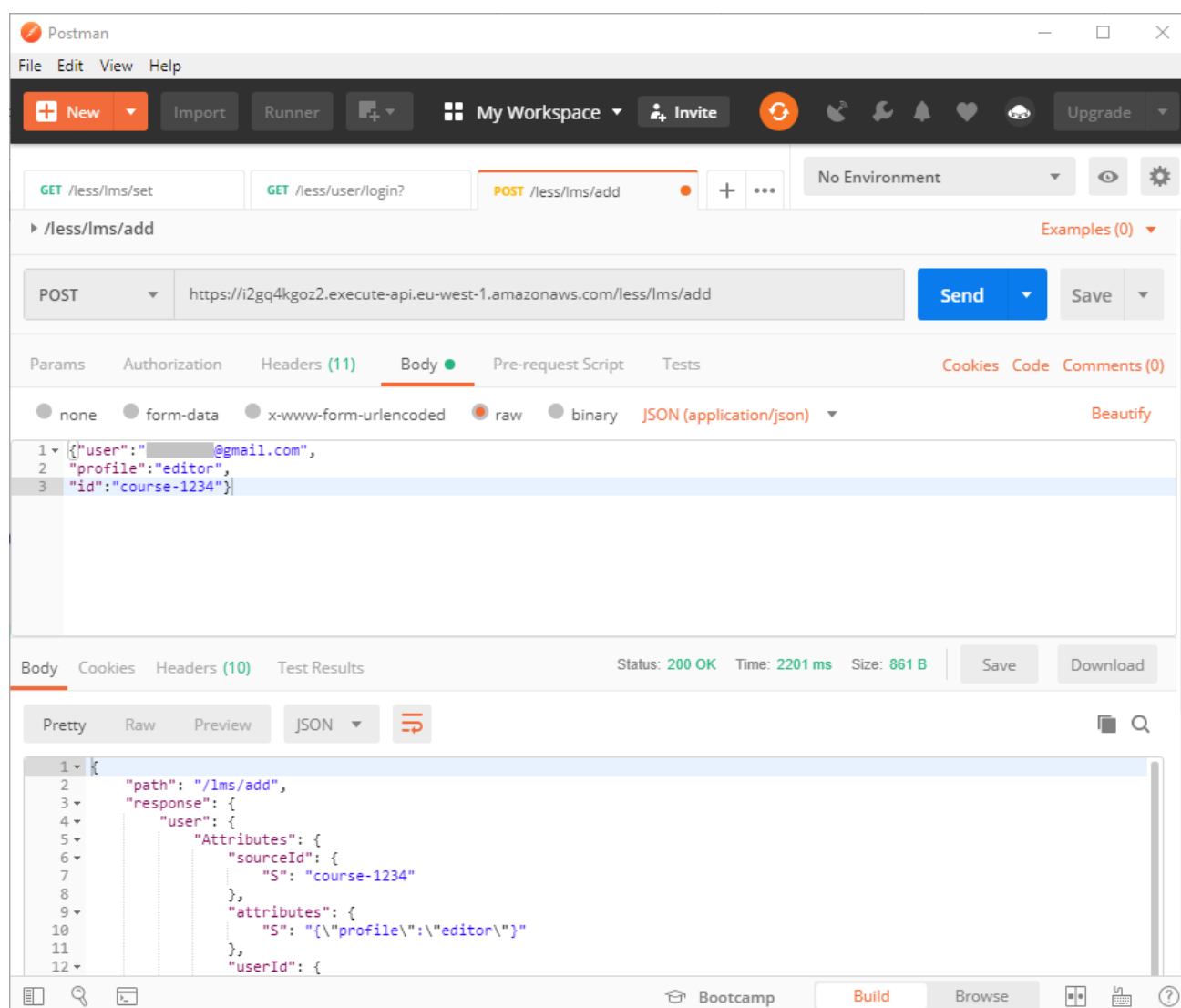
```
{
  "accessToken":
"eyJraWQ0Ij0iYUYNyWgtIc3IzQ1QzZEY5bWZhXC96eG9xUmEwTkdhSFVYeUtoXC8yTjVcL1NrPSIsImFsZyI6Ij1jMTJmU2In0.eYjzdWIiOiI2NGU0NTB1MS1jOTIyLTQ0TYt0DDlMy05YWY3ZTUxYjQxMzMiLCJldmVudF9pZCI6IjhlNTY2ZTRmLTU5ODAtMTF1OS1iYTc5LWQ1Q0GE0MzJhOGZmNCIsInRva2VuX3VzZSI6ImFjY2V2cyIsInNjb3B1IjoieYXZlLmNvZ25pdG8uc2lnbmVudmVzXlUyWWRtaW4iLCJhdXRoX3RpbWUiOiJfE1NTY0MzZmNDcsImVudC51dS13ZXN0LEUyYWIhem9uYXZzLmNvbVwvZXUt2VzdC0xX2h5aFpHbG9rZSIsImV4cCI6MTU1NjQzNzI0NywiawF0IjoXNTU2NDMzNjQ3LjQ3dGkiOiI4N2EwOTI4Ni03NGZlLTR1RMW0tYTE2Yy0wN2IwMTMzMtB1MzEiLCJjaGllbmRfawQiOiI2MzFhbWQ2dW10djZta2k0bjEydmp
```

## TFG: Implementación de un Sistema de Gestión del Aprendizaje basado en arquitectura sin servidor.

Oscar Sanz Llopis, 2019

```
pbHRmNyIsInVzZXJuYw11IjoInjRlNDUwZTETyZkyMi00ODk2LTg3ZTMtOWFmN2U1MWI0MTMzIn0.VR5eLu5FmgWCltnKswLuv
KXr1vJiS4nZmF8rXwya_aHJ3zw7QWz7n2Y430ayHseez869L5KB9PeIJ0_fzcjrxj1PQhDSgCQEi5C5gq8ms5DKyjRy84xN23D
y6b9yiGfVXdYD-pyShuySajCvqIiY8rxueV0YHdNTaf1J81qgyUOUY8EJYE1biJormyjoX0zuOyY0DSEoRzH30-
7g6W8ewhSnXhxN48-
YDWGgameoEzIyk9JNQdBt6Z0jB6oc62IHxwCITw5hNMhHrFqcau96YQBHTJzWTqd8KaQYoNcZVXxgNM4pbX5We2M-
gQcWB7dRrUj58qZ0SC4_1fxu6j4k4g",
  "profile": "editor",
  "email": "-----@gmail.com"
}
```

Punto de entrada (API Gateway)	Tipo petición	Función Lambda	Resultado
/less/lms/add	POST	lmsLambda	Correcto



The screenshot shows the Postman interface with a POST request to `https://i2gq4kgoz2.execute-api.eu-west-1.amazonaws.com/less/lms/add`. The request body is a JSON object:

```
{
  "user": "-----@gmail.com",
  "profile": "editor",
  "id": "course-1234"
}
```

The response is a JSON object:

```
{
  "path": "/lms/add",
  "response": {
    "user": {
      "Attributes": {
        "sourceId": {
          "S": "course-1234"
        },
        "attributes": {
          "S": "{\"profile\":\"editor\"}"
        }
      },
      "userId": {

```

Respuesta completa:

```
{
  "path": "/lms/add",
```

```

"response": {
  "user": {
    "Attributes": {
      "sourceId": {
        "S": "course-1234"
      },
      "attributes": {
        "S": "{\"profile\":\"editor\"}"
      },
      "userId": {
        "S": "-----@gmail.com"
      }
    }
  },
  "course": {
    "Attributes": {
      "cDate": {
        "S": "1556434292890"
      },
      "content": {
        "S": "{\"subject\":\"\", \"abstract\":\"\"}"
      },
      "sourceId": {
        "S": "course-1234"
      },
      "mDate": {
        "S": "1556434292890"
      },
      "relatedId": {
        "S": "course-1234"
      },
      "type": {
        "S": "tCOURSE"
      }
    }
  }
}

```

Resultado en DynamoDB – Tabla 'users':

TFG: Implementación de un Sistema de Gestión del Aprendizaje basado en arquitectura sin servidor.

Oscar Sanz Llopis, 2019



users Cerrar

Información general **Elementos** Métricas Alarmas Capacidad Índices Tablas globales Copias de seguridad Más ▾

Crear elemento Acciones ▾

Examen: [Tabla] users: userid, sourceid ^

Mostrando 1 de 1 elementos

Examen ▾ [Tabla] users: userid, sourceid ▾ ^

+ Añadir filtro

Iniciar búsqueda

userid ⓘ	sourceid	attributes
@gmail.com	course-1234	{\"profile\": \"editor\"}

Resultado en DynamoDB – Tabla 'courses':



courses Cerrar

Información general **Elementos** Métricas Alarmas Capacidad Índices Tablas globales Copias de seguridad Más ▾

Crear elemento Acciones ▾

Examen: [Tabla] courses: sourceid, relatedid ^

Mostrando 1 de 1 elementos

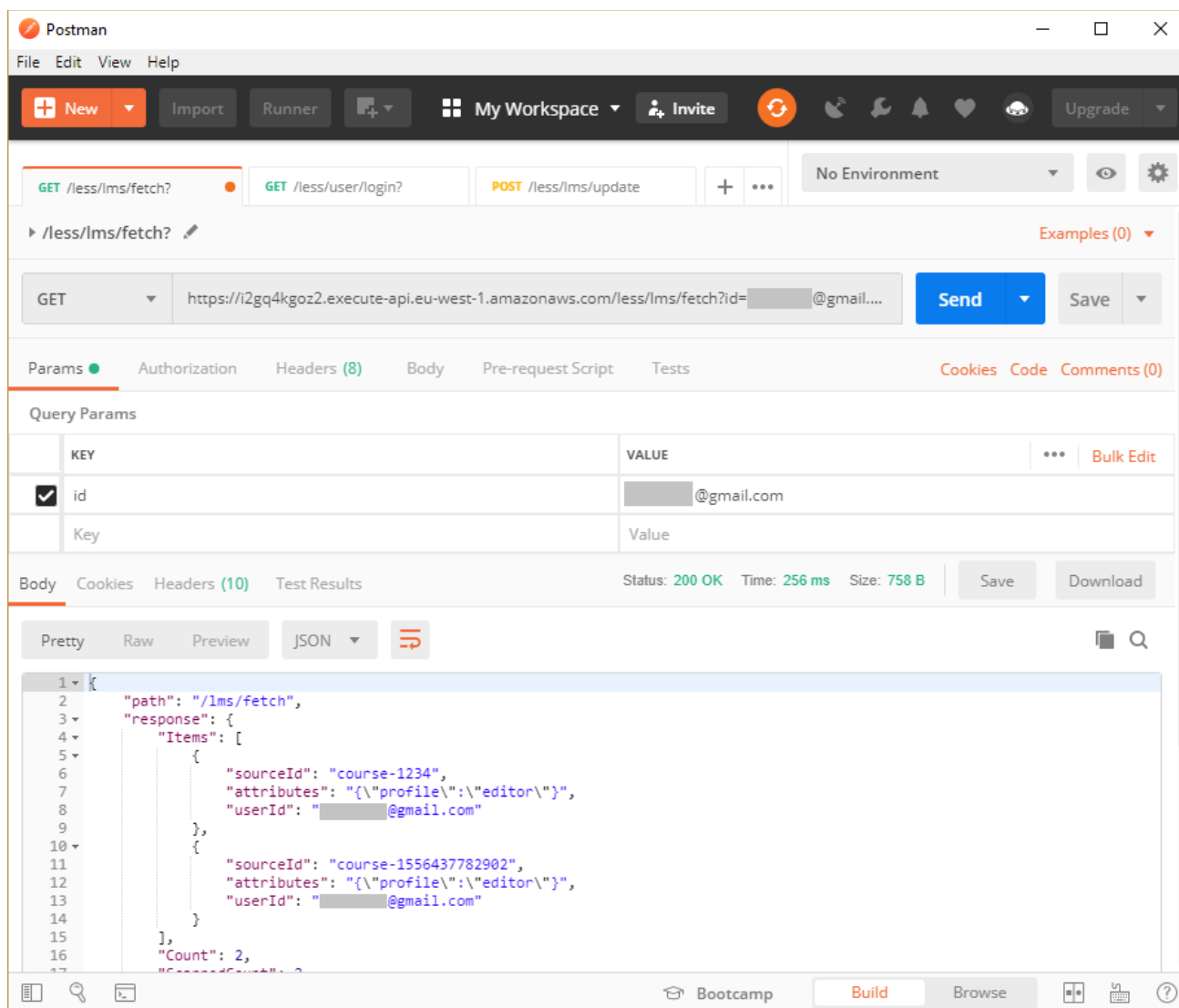
Examen ▾ [Tabla] courses: sourceid, relatedid ▾ ^

+ Añadir filtro

Iniciar búsqueda

sourceid	relatedid	cDate	content ⓘ	mDate	type
course-1234	course-1234	1556434292890	{\"subject\": \"\", \"abstract\": \"\"}	1556434292890	tCOURSE

Punto de entrada (API Gateway)	Tipo petición	Función Lambda	Resultado
/less/lms/fetch	GET	lmsLambda	Correcto



The screenshot shows the Postman interface with a GET request to `https://i2gq4kgoz2.execute-api.eu-west-1.amazonaws.com/less/lms/fetch?id=...@gmail.com`. The response is a 200 OK with a status of 200 OK, time of 256 ms, and size of 758 B. The response body is displayed in JSON format:

```
{
  "path": "/lms/fetch",
  "response": {
    "Items": [
      {
        "sourceId": "course-1234",
        "attributes": "{\"profile\":\"editor\"}",
        "userId": "-----@gmail.com"
      },
      {
        "sourceId": "course-1556437782902",
        "attributes": "{\"profile\":\"editor\"}",
        "userId": "-----@gmail.com"
      }
    ],
    "Count": 2,
    "SuccessCount": 2
  }
}
```

Respuesta completa:

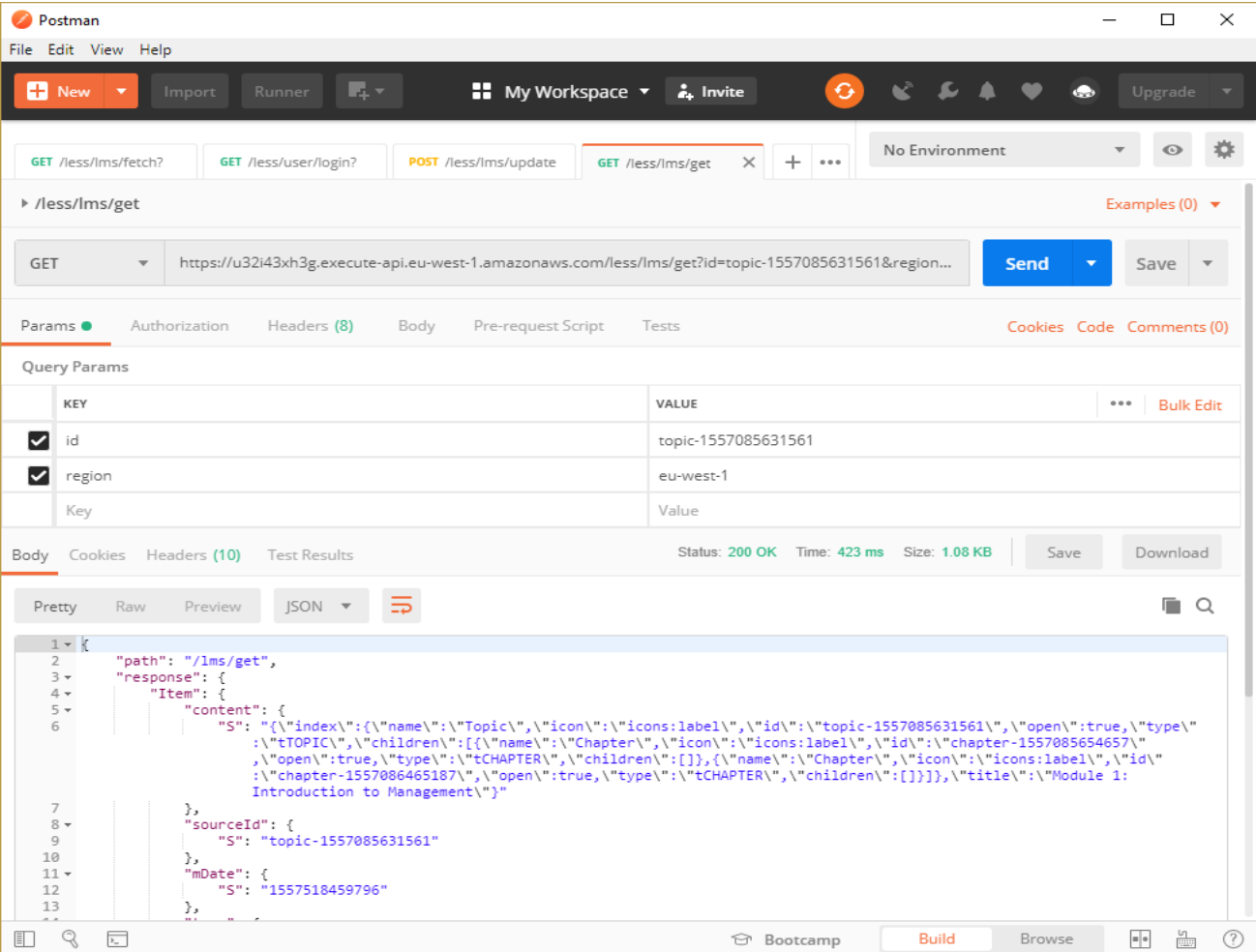
```
{
  "path": "/lms/fetch",
  "response": {
    "Items": [
      {
        "sourceId": "course-1234",
        "attributes": "{\"profile\":\"editor\"}",
        "userId": "-----@gmail.com"
      },
      {
        "sourceId": "course-1556437782902",
        "attributes": "{\"profile\":\"editor\"}",
        "userId": "-----@gmail.com"
      }
    ],
    "Count": 2,
    "SuccessCount": 2
  }
}
```

```

    "ScannedCount": 2,
    "resolved": "users"
  }
}

```

Punto de entrada (API Gateway)	Tipo petición	Función Lambda	Resultado
/less/lms/get	GET	lmsLambda	Correcto



The screenshot shows the Postman interface with a GET request to `https://u32i43xh3g.execute-api.eu-west-1.amazonaws.com/less/lms/get?id=topic-1557085631561&region=eu-west-1`. The response status is 200 OK, and the body is a JSON object:

```

{
  "path": "/lms/get",
  "response": {
    "Item": {
      "content": {
        "S": "{\n\"index\":{\n\"name\":\n\"Topic\", \n\"icon\":\n\"icons:label\", \n\"id\":\n\"topic-1557085631561\", \n\"open\":true, \n\"type\":\n\"tTOPIC\", \n\"children\":[\n{\n\"name\":\n\"Chapter\", \n\"icon\":\n\"icons:label\", \n\"id\":\n\"chapter-1557085654657\", \n\"open\":true, \n\"type\":\n\"tCHAPTER\", \n\"children\":[\n], \n{\n\"name\":\n\"Chapter\", \n\"icon\":\n\"icons:label\", \n\"id\":\n\"chapter-1557086465187\", \n\"open\":true, \n\"type\":\n\"tCHAPTER\", \n\"children\":[\n], \n}\n]\n}, \n\"title\":\n\"Module 1: Introduction to Management\"}\n}"
      },
      "sourceId": {
        "S": "topic-1557085631561"
      },
      "mDate": {
        "S": "1557518459796"
      }
    }
  }
}

```

Respuesta completa:

```

{
  "path": "/lms/get",
  "response": {
    "Item": {
      "content": {
        "S": "{\n\"index\":{\n\"name\":\n\"Topic\", \n\"icon\":\n\"icons:label\", \n\"id\":\n\"topic-1557085631561\", \n\"open\":true, \n\"type\":\n\"tTOPIC\", \n\"children\":[\n{\n\"name\":\n\"Chapter\", \n\"icon\":\n\"icons:label\", \n\"id\":\n\"chapter-1557085654657\", \n\"open\":true, \n\"type\":\n\"tCHAPTER\", \n\"children\":[\n], \n{\n\"name\":\n\"Chapter\", \n\"icon\":\n\"icons:label\", \n\"id\":\n\"chapter-1557086465187\", \n\"open\":true, \n\"type\":\n\"tCHAPTER\", \n\"children\":[\n], \n}\n]\n}, \n\"title\":\n\"Module 1: Introduction to Management\"}\n}"
      },
      "sourceId": {
        "S": "topic-1557085631561"
      },
      "mDate": {
        "S": "1557518459796"
      }
    }
  }
}

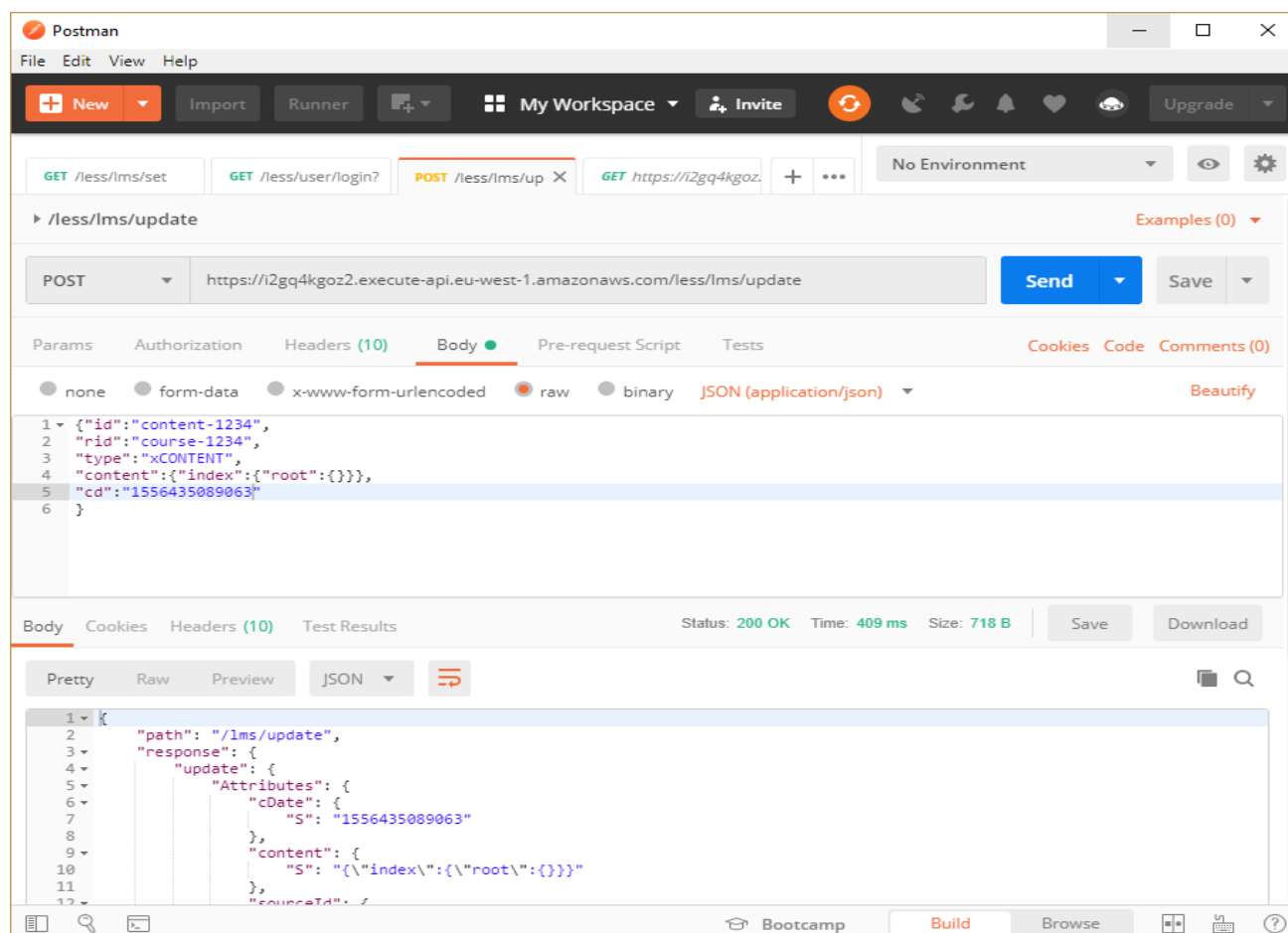
```

## TFG: Implementación de un Sistema de Gestión del Aprendizaje basado en arquitectura sin servidor.

Oscar Sanz Llopis, 2019

```
1557086465187\", \"open\": true, \"type\": \"tCHAPTER\", \"children\": []}}, \"title\": \"Module
Introduction to Management\"}
},
\"sourceId\": {
  \"S\": \"topic-1557085631561\"
},
\"mDate\": {
  \"S\": \"1557518459796\"
},
\"type\": {
  \"S\": \"tTOPIC\"
},
\"relatedId\": {
  \"S\": \"topic-1557085631561\"
}
}
}
```

Punto de entrada (API Gateway)	Tipo petición	Función Lambda	Resultado
/less/lms/update	POST	lmsLambda	Correcto



The screenshot shows the Postman interface for a POST request to `https://i2gq4kgoz2.execute-api.eu-west-1.amazonaws.com/less/lms/update`. The request body is a JSON object:

```
{
  "id": "content-1234",
  "rid": "course-1234",
  "type": "xCONTENT",
  "content": {
    "index": {
      "root": {}
    }
  },
  "cd": "1556435089063"
}
```

The response is a 200 OK status with a JSON body:

```
{
  "path": "/lms/update",
  "response": {
    "update": {
      "Attributes": {
        "cDate": {
          "S": "1556435089063"
        }
      },
      "content": {
        "S": "{\\\"index\\\":{\\\"root\\\":{\\\"}\\\"}}}"
      }
    }
  }
}
```

Respuesta completa:

```
{
  "path": "/lms/update",
  "response": {
    "update": {
      "Attributes": {
        "cDate": {
          "S": "1556435089063"
        },
        "content": {
          "S": "{\"index\":{\"root\":{}}}"
        },
        "sourceId": {
          "S": "content-1234"
        },
        "mDate": {
          "S": "1556435896729"
        },
        "relatedId": {
          "S": "course-1234"
        },
        "type": {
          "S": "xCONTENT"
        }
      }
    }
  }
}
```

Resultado en DynamoDB – Tabla 'courses':

Crear tabla

Filtrar por nombre

Nombre

☒ courses
   
☐ published
   
☐ users
   
☐ xFilter
   
☐ xState
   
☐ xStatement

courses Cerrar

Información general

Elementos

Métricas

Alarmas

Capacidad

Índices

Tablas globales

Copias de seguridad

Más

Crear elemento

Acciones

Examen: [Tabla] courses: sourceId, relatedId

Mostrando 1 de 2 elementos

Examen

[Tabla] courses: sourceId, relatedId

Añadir filtro

Iniciar búsqueda

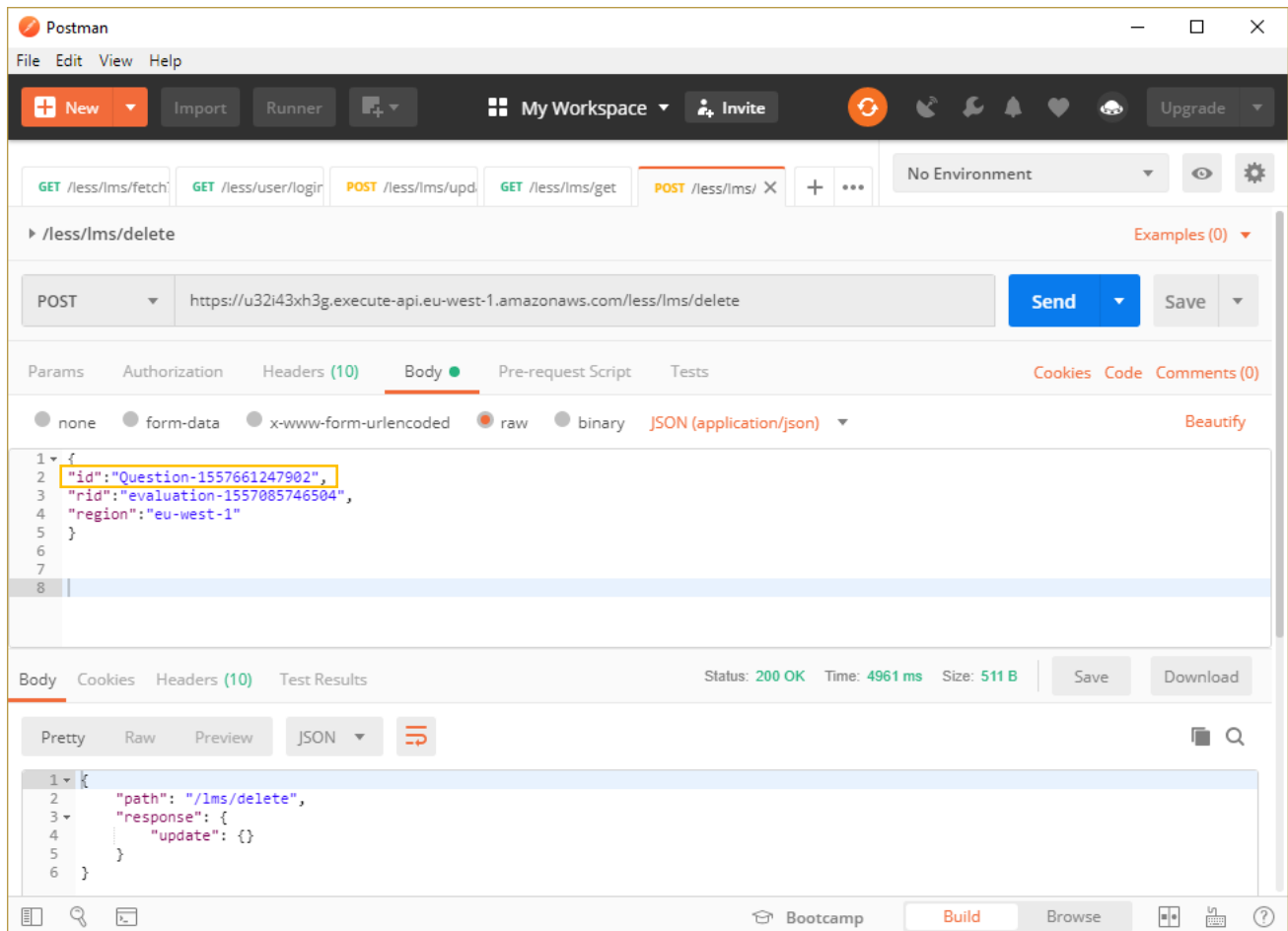
	sourceId	relatedId	cDate	content	mDate
<input type="checkbox"/>	content-1234	course-1234	1556435089063	{"index":{"root":{}}	1556435896729
<input type="checkbox"/>	course-1234	course-1234	1556434292890	{"subject":"","abstract":""}	1556434292890



TFG: Implementación de un Sistema de Gestión del Aprendizaje basado en arquitectura sin servidor.

Oscar Sanz Llopis, 2019

Punto de entrada (API Gateway)	Tipo petición	Función Lambda	Resultado
/less/lms/delete	POST	lmsLambda	Correcto



Postman interface showing a successful POST request to the endpoint `/less/lms/delete`. The request body is a JSON object:

```

{
  "id": "Question-1557661247902",
  "rid": "evaluation-1557085746504",
  "region": "eu-west-1"
}

```

The response is a JSON object:

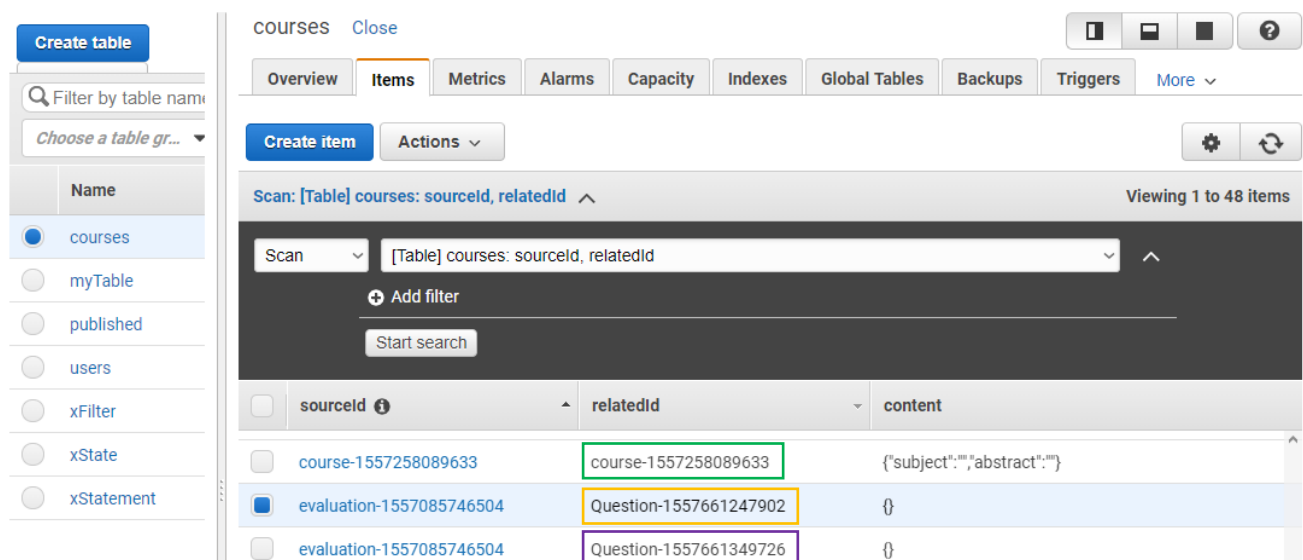
```

{
  "path": "/lms/delete",
  "response": {
    "update": {}
  }
}

```

Status: 200 OK, Time: 4961 ms, Size: 511 B.

Resultado en DynamoDB – Tabla 'courses':



AWS DynamoDB console showing the 'courses' table. The table contains four items:

sourceId	relatedId	content
course-1557258089633	course-1557258089633	{ "subject": "abstract" }
evaluation-1557085746504	Question-1557661247902	{}
evaluation-1557085746504	Question-1557661349726	{}

Create table

Filter by table name

Choose a table group

Name

courses

myTable

published

users

xFilter

xState

xStatement

courses Close

Overview

Items

Metrics

Alarms

Capacity

Indexes

Global Tables

Backups

Triggers

More

Create item

Actions

Scan: [Table] courses: sourceId, relatedId

Viewing 1 to 46 items

Scan

[Table] courses: sourceId, relatedId

Add filter

Start search

	sourceId	relatedId	content
<input type="checkbox"/>	course-1557258089633	course-1557258089633	{"subject": " ", "abstract": " "}
<input type="checkbox"/>	evaluation-1557085746504	Question-1557661349726	{}
<input type="checkbox"/>	evaluation-1557085746504	Question-1557661488182	{}