Ejercicio Práctico

IMPLEMENTACIÓN DE UNA API HTTP CON SOCKETS Y MYSQL EN JAVA

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Contenido

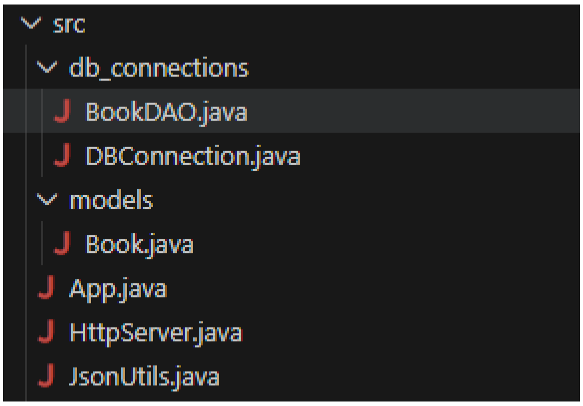
1. Estructura del Proyecto

Para que el proyecto funcione, debe estar instalado MySQL y tener la base de datos y usuario creado.

Simplemente con ejecutar una vez “WebSocket.sql” se genera la BD y usuario con datos de prueba.

El proyecto en sí, está compuesto de 6 archivos .java, donde el mayor peso recae en HttpServer.java y BookDAO.java

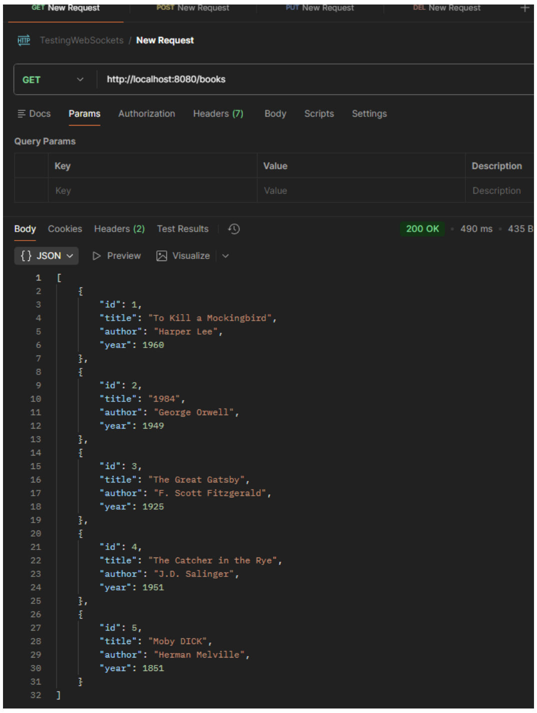
Siendo HttpServer.java el encargado de enrutar, y contactar con las peticiones y mandar a realizarlas a la base de datos a BookDAO.java.



```
src
  db_connections
    BookDAO.java
    DBConnection.java
  models
    Book.java
  App.java
  HttpServer.java
  JsonUtils.java
```

2. Pruebas del proyecto

2.1. GET

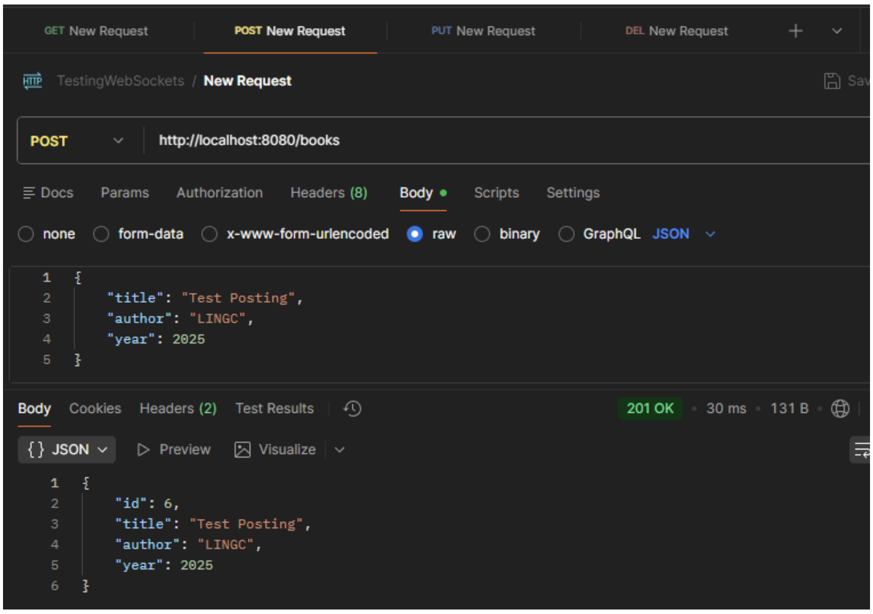


GET http://localhost:8080/books

200 OK · 490 ms · 435 B

```
[
    {
        "id": 1,
        "title": "To Kill a Mockingbird",
        "author": "Harper Lee",
        "year": 1960
    },
    {
        "id": 2,
        "title": "1984",
        "author": "George Orwell",
        "year": 1949
    },
    {
        "id": 3,
        "title": "The Great Gatsby",
        "author": "F. Scott Fitzgerald",
        "year": 1925
    },
    {
        "id": 4,
        "title": "The Catcher in the Rye",
        "author": "J.D. Salinger",
        "year": 1951
    },
    {
        "id": 5,
        "title": "Moby DICK",
        "author": "Herman Melville",
        "year": 1851
    }
]
```

2.2. POST



POST http://localhost:8080/books

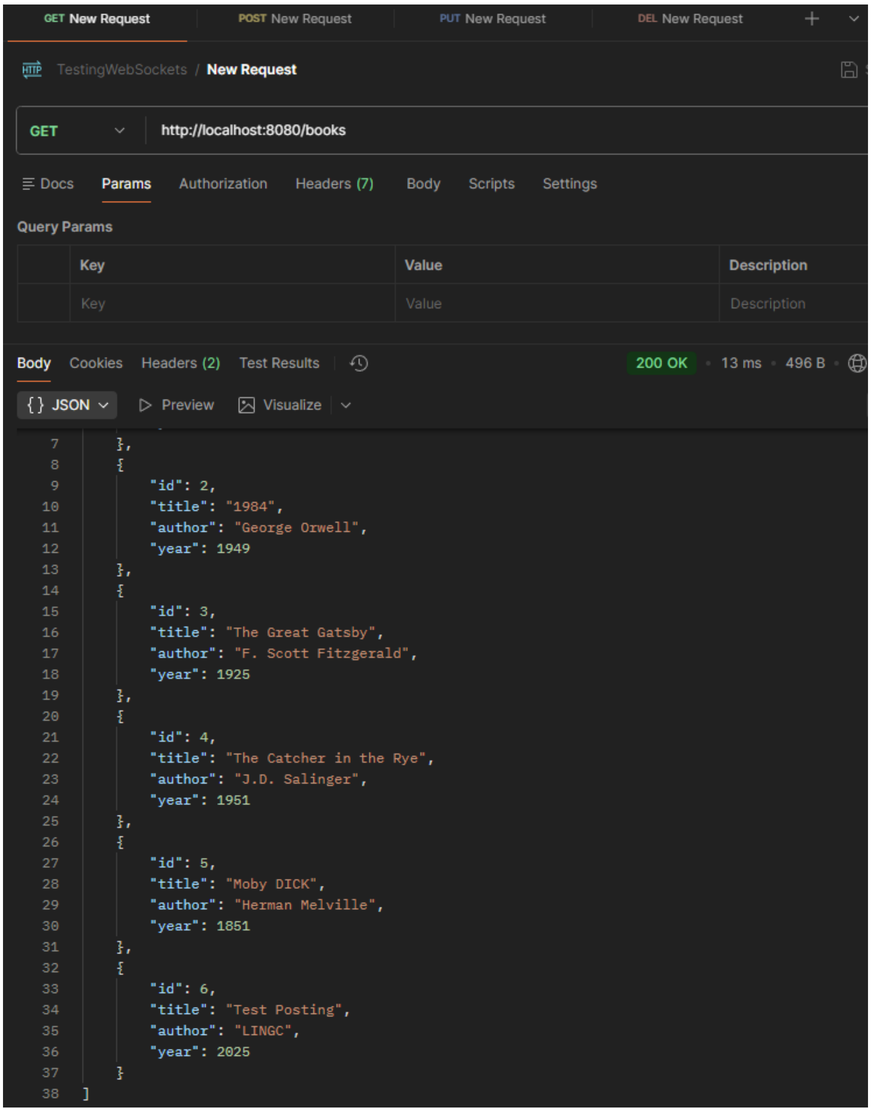
○ none ○ form-data ○ x-www-form-urlencoded ● raw ○ binary ○ GraphQL JSON

```
{
    "title": "Test Posting",
    "author": "LINGC",
    "year": 2025
}
```

Body — 201 OK • 30 ms • 131 B

{} JSON

```
{
    "id": 6,
    "title": "Test Posting",
    "author": "LINGC",
    "year": 2025
}
```



GET http://localhost:8080/books

Query Params

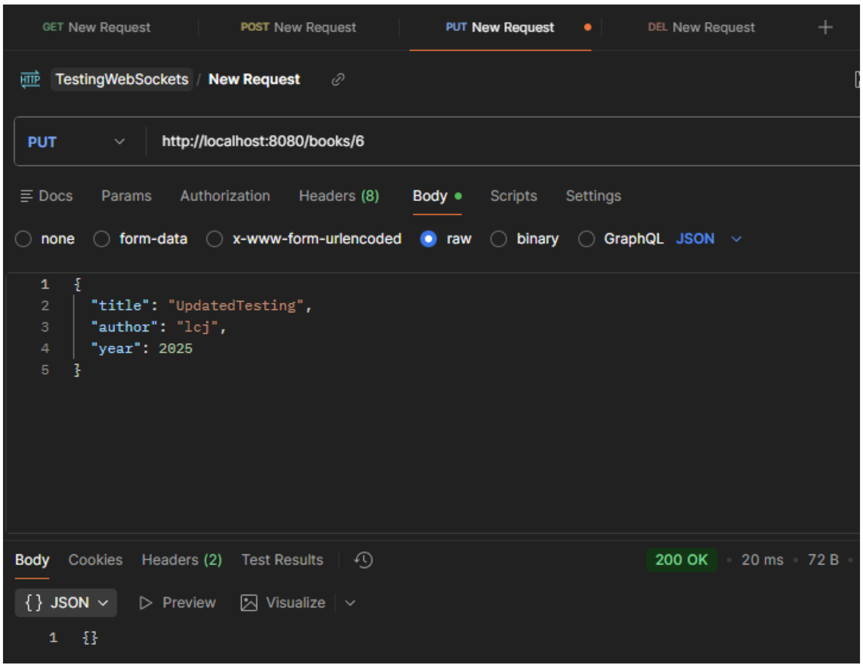
	Key	Value	Description
	Key	Value	Description

Body — 200 OK • 13 ms • 496 B

{} JSON

```
    },
    {
        "id": 2,
        "title": "1984",
        "author": "George Orwell",
        "year": 1949
    },
    {
        "id": 3,
        "title": "The Great Gatsby",
        "author": "F. Scott Fitzgerald",
        "year": 1925
    },
    {
        "id": 4,
        "title": "The Catcher in the Rye",
        "author": "J.D. Salinger",
        "year": 1951
    },
    {
        "id": 5,
        "title": "Moby DICK",
        "author": "Herman Melville",
        "year": 1851
    },
    {
        "id": 6,
        "title": "Test Posting",
        "author": "LINGC",
        "year": 2025
    }
]
```

2.3. PUT

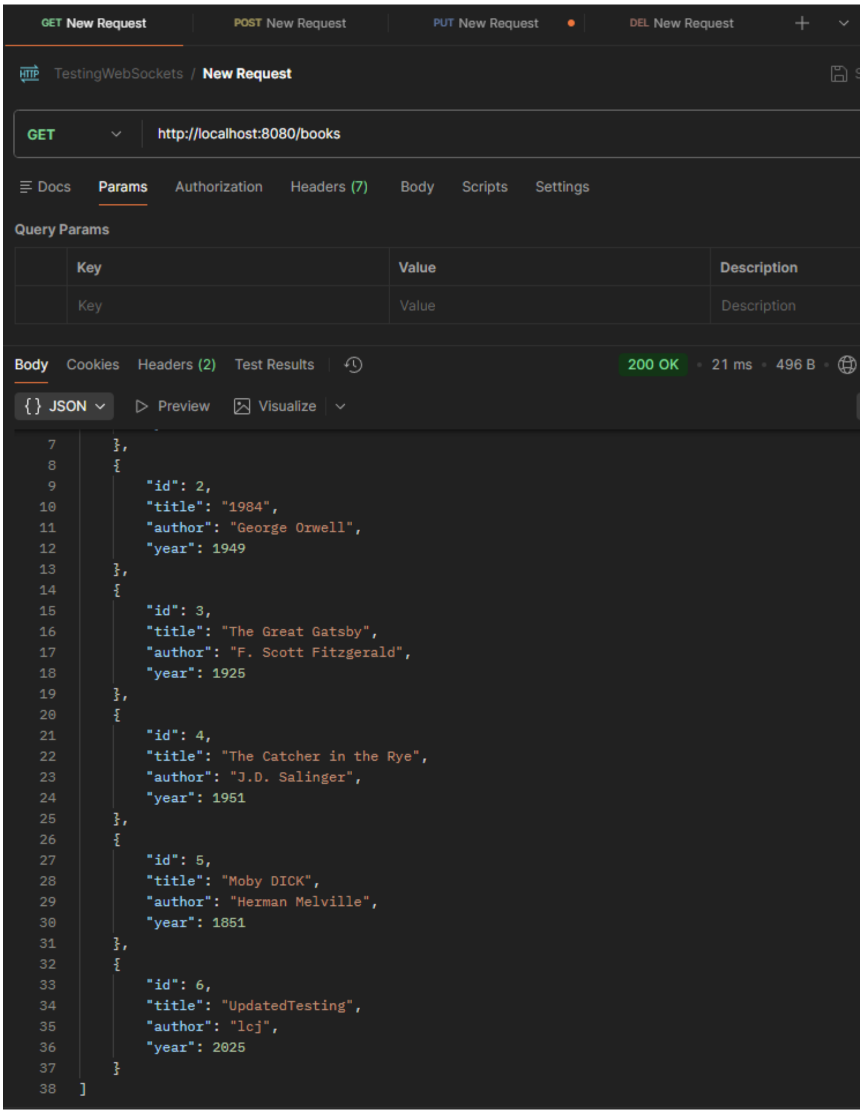


PUT http://localhost:8080/books/6

```
{
  "title": "UpdatedTesting",
  "author": "lcj",
  "year": 2025
}
```

200 OK · 20 ms · 72 B

```
{}
```



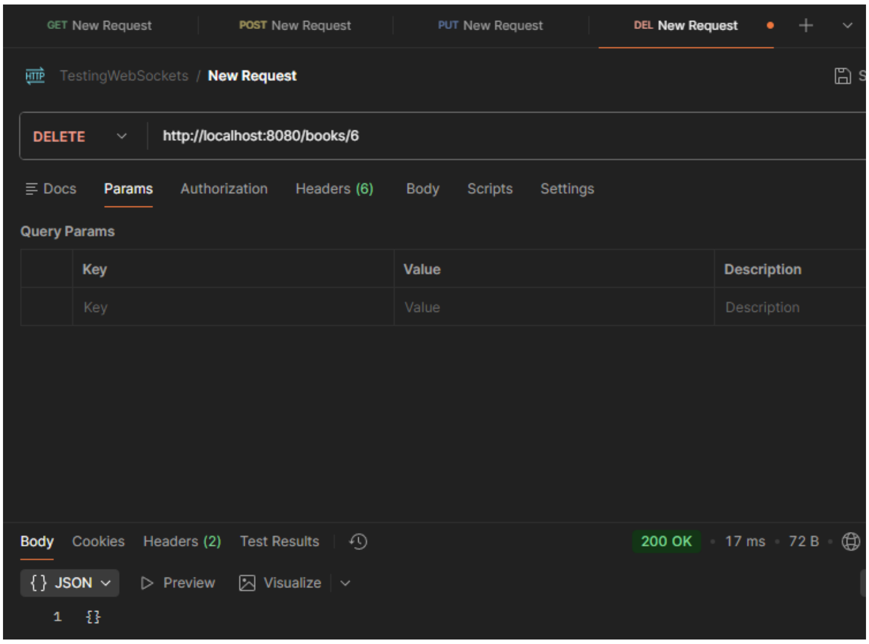
GET http://localhost:8080/books

Key	Value	Description
Key	Value	Description

200 OK · 21 ms · 496 B

```
    },
    {
        "id": 2,
        "title": "1984",
        "author": "George Orwell",
        "year": 1949
    },
    {
        "id": 3,
        "title": "The Great Gatsby",
        "author": "F. Scott Fitzgerald",
        "year": 1925
    },
    {
        "id": 4,
        "title": "The Catcher in the Rye",
        "author": "J.D. Salinger",
        "year": 1951
    },
    {
        "id": 5,
        "title": "Moby DICK",
        "author": "Herman Melville",
        "year": 1851
    },
    {
        "id": 6,
        "title": "UpdatedTesting",
        "author": "lcj",
        "year": 2025
    }
]
```

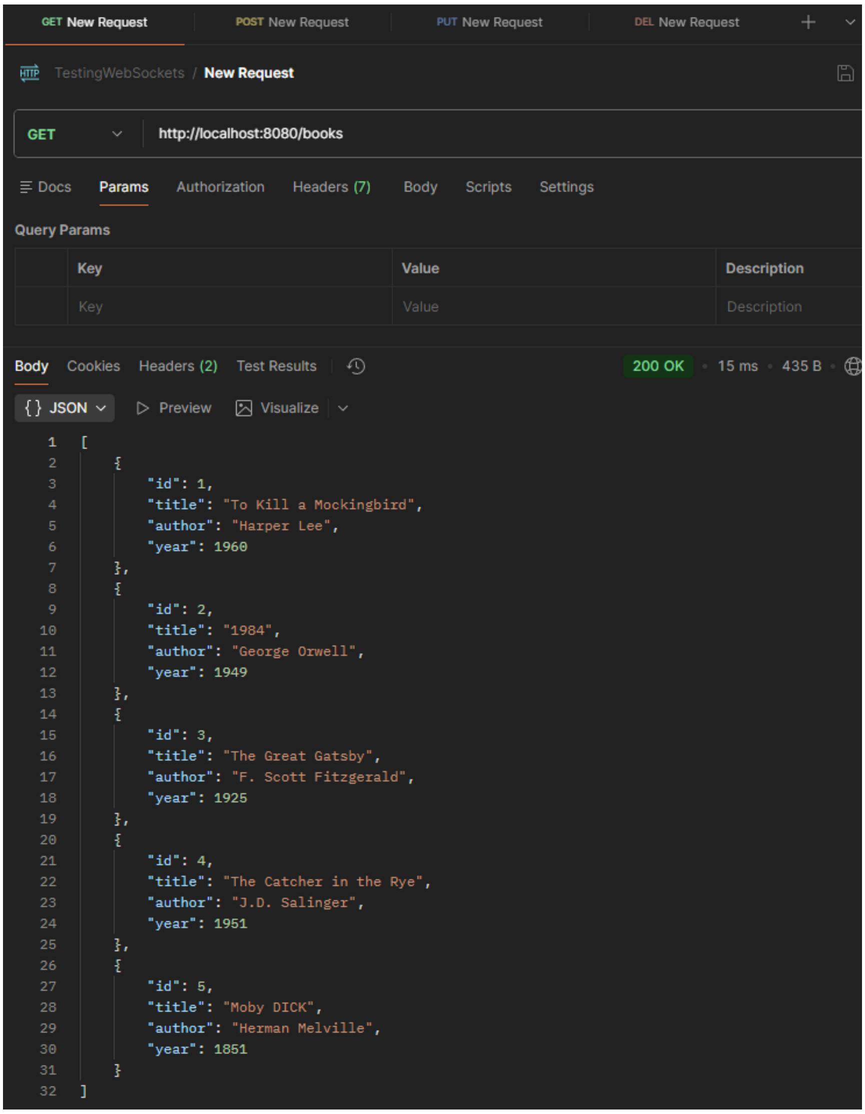
2.4. DELETE



DELETE http://localhost:8080/books/6

200 OK • 17 ms • 72 B

```
{}
```



GET http://localhost:8080/books

200 OK • 15 ms • 435 B

```
[
    {
        "id": 1,
        "title": "To Kill a Mockingbird",
        "author": "Harper Lee",
        "year": 1960
    },
    {
        "id": 2,
        "title": "1984",
        "author": "George Orwell",
        "year": 1949
    },
    {
        "id": 3,
        "title": "The Great Gatsby",
        "author": "F. Scott Fitzgerald",
        "year": 1925
    },
    {
        "id": 4,
        "title": "The Catcher in the Rye",
        "author": "J.D. Salinger",
        "year": 1951
    },
    {
        "id": 5,
        "title": "Moby DICK",
        "author": "Herman Melville",
        "year": 1851
    }
]
```