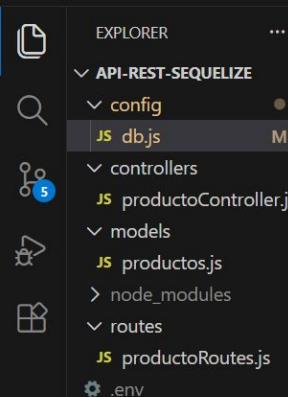
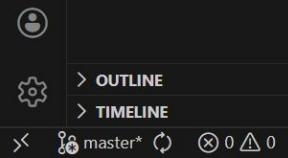


RA1-5. Taller express.js
2ºDAM
Ricardo Boza Villar
2026-01-22



```
JS db.js M X
config > JS dbjs > ...
1 import { Sequelize } from "sequelize";
2
3 export const sequelize = new Sequelize(
4   process.env.DB_NAME,
5   process.env.DB_USER,
6   process.env.DB_PASSWORD,
7   {
8     host: process.env.DB_HOST,
9     port: process.env.DB_PORT,
10    dialect: "mysql",
11    logging: false
12  }
13 );
14
15 // Comprobar conexión
16 (async () => {
17   try {
18     await sequelize.authenticate();
19     console.log("Conexión establecida con la base de datos.");
20   } catch (error) {
21     console.error("Error al conectar a la base de datos:", error);
22   }
23 })();
```



EXPLORER ...

API-R... 🔍 🛡️ 🗃️

config

✓ dbjs M

controllers

5 JS productoController.js

models

✓ productos.js

> node_modules

routes

✓ productoRoutes.js

.env

.gitignore M

{ package-lock.json M

{ packagejson M

JS server.js M

OUTLINE

TIMELINE

JS productoController.js

controllers > JS productoController.js > ...

```
1 import { Producto } from "../models/productos.js";
2
3 // CREATE
4 export const crearProducto = async (req, res) => {
5   try {
6     const nuevoProducto = await Producto.create(req.body);
7     res.status(201).json(nuevoProducto);
8   } catch (error) {
9     res.status(500).json({ mensaje: "Error al crear producto", error });
10  }
11};

12 // READ (todos)
13 export const obtenerProductos = async (req, res) => {
14   try {
15     const productos = await Producto.findAll();
16     res.json(productos);
17   } catch (error) {
18     res.status(500).json({ mensaje: "Error al obtener productos", error });
19   }
20};

21 // READ (uno)
22 export const obtenerProducto = async (req, res) => {
23   try {
24     const producto = await Producto.findByPk(req.params.id);
25     if (!producto)
26       return res.status(404).json({ mensaje: "No encontrado" });
27     res.json(producto);
28   } catch (error) {
29     res.status(500).json({ mensaje: "Error al obtener producto", error });
30   }
31};

32
33};
```

File Edit Selection View Go Run ... ← → Q api-rest-sequelize

EXPLORER ... JS productos.js X

models > JS productos.js > ...

```
1 import { DataTypes } from "sequelize";
2 import { sequelize } from "../config/db.js";
3
4 export const Producto = sequelize.define(
5   "Producto",
6   {
7     id: {
8       type: DataTypes.INTEGER,
9       autoIncrement: true,
10      primaryKey: true
11    },
12    nombre: {
13      type: DataTypes.STRING,
14      allowNull: false
15    },
16    precio: {
17      type: DataTypes.FLOAT,
18      allowNull: false
19    },
20    stock: {
21      type: DataTypes.INTEGER,
22      defaultValue: 0
23    },
24  },
25  {
26    tableName: "productos",
27    timestamps: true
28  }
29 );
30
```

API-REST-SEQUELIZE

- config
- JS dbjs M
- controllers
- JS productoController.js
- models
 - JS productos.js
- node_modules
- routes
 - JS productoRoutes.js
- .env
- .gitignore M
- { package-lock.json M
- { packagejson M
- JS server.js M

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EXPLORER ...
API-REST-SEQUELIZE
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productoRoutes.js M
.env
.gitignore M
package-lock.json M
packagejson M
server.js M

JS productoRoutes.js X
routes > JS productoRoutes.js > ...
1 import express from "express";
2 import {
3 crearProducto,
4 obtenerProductos,
5 obtenerProducto,
6 actualizarProducto,
7 eliminarProducto
8 } from "../controllers/productoController.js";
9
10 const router = express.Router();
11
12 router.post("/", crearProducto);
13 router.get("/", obtenerProductos);
14 router.get("/:id", obtenerProducto);
15 router.put("/:id", actualizarProducto);
16 router.delete("/:id", eliminarProducto);
17
18 export default router;
19



> OUTLINE
> TIMELINE

The screenshot shows the Visual Studio Code (VS Code) interface. The Explorer sidebar on the left displays a file tree for a project named "API-REST-SEQUELIZE". The "server.js" file is selected and its content is displayed in the main editor area. The editor shows code for setting up an Express application, connecting to a database via Sequelize, and starting the server on port 3000. The status bar at the bottom indicates the file is "master*", has 0 changes, and is in JavaScript mode.

```
JS server.js M X
JS server.js > ...
1 import 'dotenv/config';
2 import express from "express";
3 import productoRoutes from "./routes/productoRoutes.js";
4 import { sequelize } from "./config/db.js";
5
6 const app = express();
7 app.use(express.json());
8
9 // Rutas
10 app.use("/api/productos", productoRoutes);
11
12 // Sincronizar base de datos
13 (async () => {
14   try {
15     await sequelize.sync({ alter: true });
16     console.log("Tablas sincronizadas.");
17   } catch (error) {
18     console.error("Error al sincronizar las tablas:", error);
19   }
20 })();
21
22 const PORT = 3000;
23 app.listen(PORT, () =>
24   console.log(`Servidor en http://localhost:${PORT}`)
25 );
26
```



> OUTLINE

> TIMELINE

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

node + ⌂ ⏙ ⏺ | ⏹ ×

```
> nodemon server.js
```

```
[nodemon] 3.1.11
[nodemon] to restart at any time, enter `rs`
[nodemon] watching path(s): ***!
[nodemon] watching extensions: js,mjs,cjs,json
[nodemon] starting `node server.js`
Servidor en http://localhost:3000
Conexión establecida con la base de datos.
Tablas sincronizadas.
```

Ln 26, Col 1 Spaces: 2 UTF-8 CRLF { } JavaScript  

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

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Microsoft Windows [Version 10.0.26200.7623]
(c) Microsoft Corporation. All rights reserved.

node

cmd

```
C:\Users\ricar\Desktop\api-rest-sequelize>curl http://localhost:3000/api/productos
[]
C:\Users\ricar\Desktop\api-rest-sequelize>[]
```

Ln 26, Col 1 Spaces: 2 UTF-8 CRLF { } JavaScript 🌐 🔍

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

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```
C:\Users\ricar\Desktop\api-rest-sequelize>curl -X POST http://localhost:3000/api/productos -H "Content-Type: application/json" -d "{\"nombre\":\"Producto 1\",\"precio\":10}"
{"stock":0,"id":1,"nombre":"Producto 1","precio":10,"updatedAt":"2026-01-22T12:21:07.378Z","createdAt":"2026-01-22T12:21:07.378Z"}
C:\Users\ricar\Desktop\api-rest-sequelize>[]
```

node

cmd

Ln 26, Col 1 Spaces: 2 UTF-8 CRLF { } JavaScript  

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

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node

cmd

```
C:\Users\ricar\Desktop\api-rest-sequelize>curl http://localhost:3000/api/productos/1
{"id":1,"nombre":"Producto 1","precio":10,"stock":0,"createdAt":"2026-01-22T12:21:07.000Z","updatedAt":"2026-01-22T12:21:07.000Z"}
C:\Users\ricar\Desktop\api-rest-sequelize>[]
```

Ln 26, Col 1 Spaces: 2 UTF-8 CRLF { } JavaScript 🌐 🔍

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

+ ▾ ⋮ | [] X

```
C:\Users\ricar\Desktop\api-rest-sequelize>curl -X PUT http://localhost:3000/api/productos/1 -H "Content-Type: application/json" -d "{\"nombre\":\"Producto actualizado\",\"precio\":15}"
{"id":1,"nombre":"Producto actualizado","precio":15,"stock":0,"createdAt":"2026-01-22T12:21:07.000Z","updatedAt":"2026-01-22T12:22:50.593Z"}
C:\Users\ricar\Desktop\api-rest-sequelize>[]
```

node

cmd

Ln 26, Col 1 Spaces: 2 UTF-8 CRLF { } JavaScript  

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

+ ✓ ... | ☰ ✖

```
C:\Users\ricar\Desktop\api-rest-sequelize>curl -X DELETE http://localhost:3000/api/productos/1
{"mensaje": "Producto eliminado correctamente"}
C:\Users\ricar\Desktop\api-rest-sequelize>
```

c:\ node

cmd

Ln 26, Col 1 Spaces: 2 UTF-8 CRLF { } JavaScript  

