

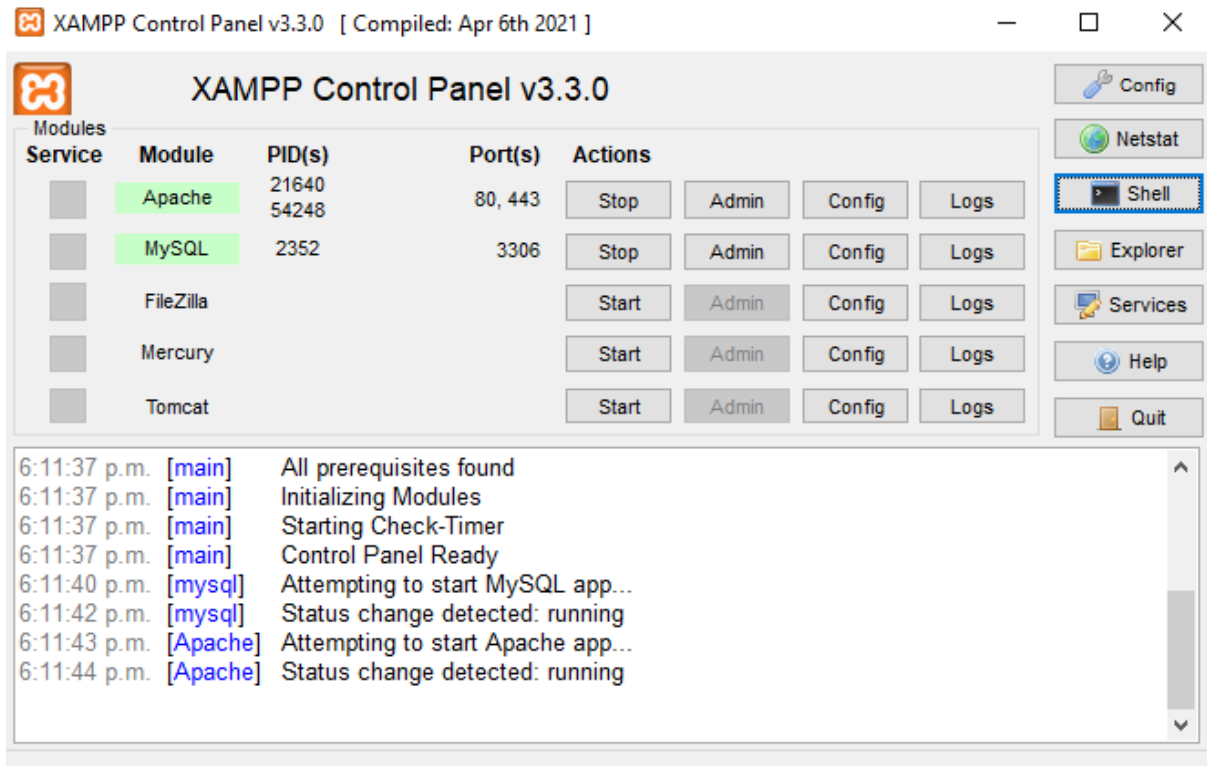
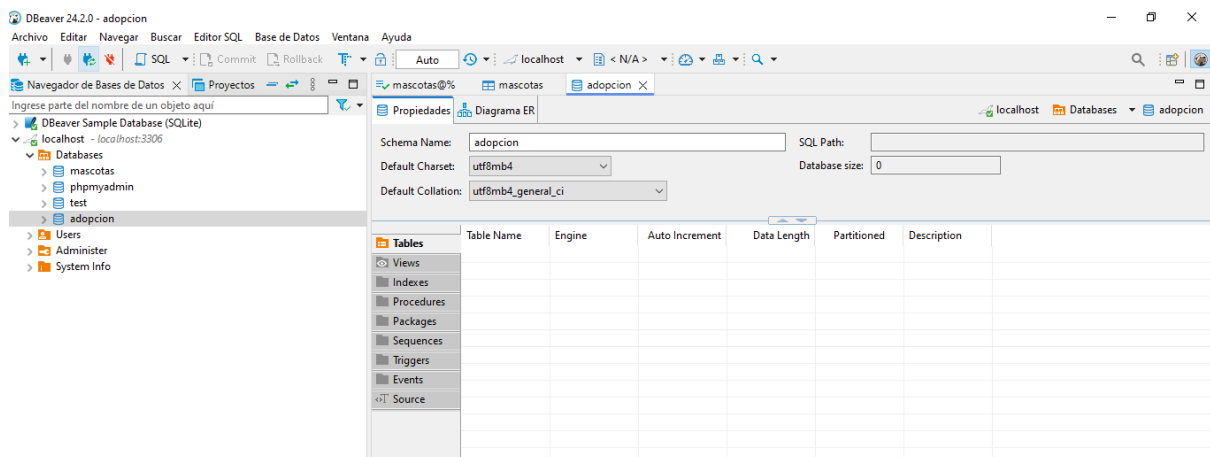
```
XAMPP for Windows - mysql -u root -p

Setting environment for using XAMPP for Windows.
Jhon Chalacan@DESKTOP-HVT3AKU c:\xampp
#
Jhon Chalacan@DESKTOP-HVT3AKU c:\xampp
# mysql -u root -p
Enter password:
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 34
Server version: 10.4.32-MariaDB mariadb.org binary distribution

Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

MariaDB [(none)]>
```



```
PROBLEMS 1 OUTPUT DEBUG CONSOLE TERMINAL PORTS powershell + v [ ] [ ] ... ^ X

PS C:\Users\Jhon Chalacan\Documents\Diplomado\tallerbackend> npm init -y
Wrote to C:\Users\Jhon Chalacan\Documents\Diplomado\tallerbackend\package.json:

{
  "name": "tallerbackend",
  "version": "1.0.0",
  "main": "index.js",
  "test": "echo \"Error: no test specified\" && exit 1",
  "keywords": [],
  "license": "ISC",
  "description": ""
}

PS C:\Users\Jhon Chalacan\Documents\Diplomado\tallerbackend> node src/app.js
PS C:\Users\Jhon Chalacan\Documents\Diplomado\tallerbackend> node src/app.js
Hola Mundo
PS C:\Users\Jhon Chalacan\Documents\Diplomado\tallerbackend> npm install nodemon
•
• added 29 packages, and audited 30 packages in 1m
•
4 packages are looking for funding
found 0 vulnerabilities
PS C:\Users\Jhon Chalacan\Documents\Diplomado\tallerbackend> npm install nodemon -D
•
• up to date, audited 30 packages in 3s
•
4 packages are looking for funding
found 0 vulnerabilities

Ln 15, Col 20 (9 selected) Spaces: 2 UTF-8 LF ( ) JSON Go Live [ ] [ ]
```

```
PROBLEMS 1 OUTPUT DEBUG CONSOLE TERMINAL PORTS

found 0 vulnerabilities
PS C:\Users\Jhon Chalacan\Documents\Diplomado\tallerbackend> npm install express

added 70 packages, and audited 100 packages in 11s

17 packages are looking for funding
  run `npm fund` for details

found 0 vulnerabilities
PS C:\Users\Jhon Chalacan\Documents\Diplomado\tallerbackend>

run `npm fund` for details

found 0 vulnerabilities
PS C:\Users\Jhon Chalacan\Documents\Diplomado\tallerbackend> npm install express

added 70 packages, and audited 100 packages in 11s

17 packages are looking for funding
  run `npm fund` for details

found 0 vulnerabilities
```

```
PROBLEMS 1 OUTPUT DEBUG CONSOLE TERMINAL PORTS power
• added 12 packages, and audited 112 packages in 5s

18 packages are looking for funding
  run `npm fund` for details

found 0 vulnerabilities
PS C:\Users\Jhon Chalacan\Documents\Diplomado\tallerbackend> npm install sequelize
• added 18 packages, and audited 130 packages in 21s

19 packages are looking for funding
  run `npm fund` for details

found 0 vulnerabilities
○ PS C:\Users\Jhon Chalacan\Documents\Diplomado\tallerbackend> 
```

```
EXPLORER ...
✓ TALLERBACKEND
  > node_modules
  ✓ src
    JS app.js
    {} package-lock.json
    {} package.json 1
```

```
JS adopcionController.js {} package.json X
() package.json > {} scripts
1 {
2   "name": "tallerbackend",
3   "version": "1.0.0",
4   "type": "module",
5   "main": "app.js",
6   "scripts": {
7     "start": "nodemon ./src/app.js",
8     "test": "echo \\\"Error: no test specified\\\" && exit 1"
9   },
10  "keywords": [],
11  "author": "",
12  "license": "ISC",
13  "description": "",
14  "devDependencies": {
15    "nodemon": "^3.1.7"
16  },
17  "dependencies": {
18    "express": "^4.21.0",
19    "mysql2": "^3.11.3",
20    "sequelize": "^6.37.3"
21  }
22 }
23
```

```
JS adopcionController.js X
src > controladores > JS adopcionController.js > ...
1 import { adopcion } from "../modelos/adopcionModelo.js";
2
3 // Función para crear una nueva mascota en adopción
4 const crear = (req, res) => {
5   if (!req.body.nombre) {
6     return res.status(400).send({
7       mensaje: "El nombre no puede estar vacío."
8     });
9   }
10
11   const dataset = {
12     nombre: req.body.nombre,
13     edad: req.body.edad,
14     raza: req.body.raza,
15     sexo: req.body.sexo,
16     color: req.body.color
17   };
18
19   adopcion.create(dataset)
20     .then((resultado) => {
21       res.status(201).send("Registro creado.");
22     })
23     .catch((err) => {
24       res.status(500).send(`Registro no creado: ${err}`);
25     });
26 };
27
28 const buscar = (req, res) => {
29   adopcion.findAll()
30     .then((mascotas) => {
31       res.status(200).json(mascotas);
32     })
33     .catch((err) => {
34       res.status(500).send(`Error al buscar mascotas: ${err}`);
35     });
36 };
37
38 // Exportar las funciones
39 export { crear, buscar };
40
```

```
JS adopcionController.js JS conexion.js X
src > database > JS conexion.js > ...
1 import Sequelize from "sequelize";
2
3 const db = new Sequelize("adopcion","adopcion","123",{
4   dialect: "mysql",
5   host: "localhost"
6 });
7
8 export {db}
```

```
JS adopcionModelo.js X
src > modelos > JS adopcionModelo.js > ...
1 import Sequelize from "sequelize";
2 import { db } from "../database/conexion.js";
3
4 const adopcion = db.define("adopcion", {
5   id: {
6     type: Sequelize.INTEGER,
7     allowNull: false,
8     autoIncrement: true,
9     primaryKey: true
10  },
11  nombre: {
12    type: Sequelize.STRING,
13    allowNull: false,
14    validate: {
15      len: {
16        args: [1, 50],
17        msg: "El nombre debe tener entre 1 y 50 caracteres"
18      }
19    }
20  },
21  edad: {
22    type: Sequelize.INTEGER,
23    allowNull: true,
24    validate: {
25      min: 0,
26      max: 30
27    }
28  },
29  raza: {
30    type: Sequelize.STRING,
31    allowNull: false,
32    validate: {
33      len: {
34        args: [1, 30],
35        msg: "La raza debe tener entre 1 y 30 caracteres"
36      }
37    }
38  },
39 }
```

```

sexo: {
  type: Sequelize.STRING,
  allowNull: false,
  validate: {
    isIn: {
      args: [['M', 'F']],
      msg: "El sexo debe ser 'M' o 'F'"
    }
  }
},
color: {
  type: Sequelize.STRING,
  allowNull: true
}
});

export { adopcion };

```

JS adopcionRouter.js X

```

src > rutas > JS adopcionRouter.js > ...
1  import express from "express";
2  import { crear, buscar } from "../controladores/adopcionController.js";
3
4  const routerAdopcion = express.Router();
5
6  routerAdopcion.get('/', (req, res) => {
7    res.send('Hola Sitio de Mascotas');
8  });
9
10 routerAdopcion.post('/crear', (req, res) => {
11   crear(req, res);
12 });
13
14 routerAdopcion.get('/buscar', (req, res) => {
15   buscar(req, res);
16 });
17
18
19 export { routerAdopcion };
20

```

JS adopcionController.js

JS app.js



src > JS app.js > ...

```
1 import express from "express";
2 import { routerAdopcion } from "../rutas/adopcionRouter.js";
3 import { db } from "../database/conexion.js";
4
5 // Crear instancia de Express
6 const app = express();
7 app.use(express.json());
8
9 // Verificar conexión a la base de datos
10 db.authenticate()
11   .then(() => {
12     console.log("Conexión a la base de datos establecida correctamente.");
13   })
14   .catch(err => {
15     console.log("No se pudo conectar a la base de datos:", err);
16   });
17
18 // Definir rutas
19 app.get('/', (req, res) => {
20   res.send('Hola Sitio Principal');
21 });
22
23 // Llamar rutas de adopción
24 app.use("/adopcion", routerAdopcion);
25
26 // Puerto del servidor
27 const PORT = 4000;
28
29 // Sincronizar la base de datos
30 db.sync({ force: false })
31   .then(() => {
32     app.listen(PORT, () => {
33       console.log(`Servidor inicializado en el puerto ${PORT}`);
34     });
35   })
36   .catch(err => {
37     console.log(`Error al sincronizar la base de datos: ${err}`);
38   });
39
```

```
JS adopcionController.js X requests.http X
requests.http > POST /adopcion/crear
Send Request
1 GET http://127.0.0.1:4000/adopcion/buscar HTTP/1.1
2
3 ###
Send Request
4 POST http://127.0.0.1:4000/adopcion/crear HTTP/1.1
5 Content-Type: application/json
6
7 {
8     "nombre": "Max",
9     "edad": 4,
10    "raza": "piquines",
11    "sexo": "F",
12    "color": "cafe"
13 }
14
15 ###
Send Request
16 PUT http://127.0.0.1:4000/adopcion/actualizar/2 HTTP/1.1
17
18 ###
Send Request
19 DELETE http://127.0.0.1:4000/adopcion/eliminar/2 HTTP/1.1
20
```

```
JS adopcionController.js X requests.http X ... Response(523ms) X
requests.http > POST /adopcion/crear
Send Request
1 GET http://127.0.0.1:4000/adopcion/buscar HTTP/1.1
2
3 ###
Send Request
4 POST http://127.0.0.1:4000/adopcion/crear HTTP/1.1
5 Content-Type: application/json
6
7 {
8     "nombre": "Max",
9     "edad": 4,
10    "raza": "piquines",
11    "sexo": "F",
12    "color": "cafe"
13 }
14
15 ###
Send Request
16 PUT http://127.0.0.1:4000/adopcion/actualizar/2 HTTP/1.1
17
18 ###
Send Request
19 DELETE http://127.0.0.1:4000/adopcion/eliminar/2 HTTP/1.1
20

1 HTTP/1.1 201 Created
2 X-Powered-By: Express
3 Content-Type: text/html; charset=utf-8
4 Content-Length: 16
5 ETag: W/"1B-1QivI2jRNUK6Fv+FtOTLLQhtQ"
6 Date: Wed, 02 Oct 2024 11:53:27 GMT
7 Connection: keep-alive
8 keep-alive: timeout=5
9
10 Registro creado.
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

```
Executing (default): SELECT 1+1 AS result
Executing (default): SELECT TABLE_NAME FROM INFORMATION_SCHEMA.TABLES WHERE TABLE_TYPE = 'BASE TABLE' AND TABLE_NAME = 'adopcions' AND TABLE_SCHEMA = 'adopcion'
Conexión a la base de datos establecida correctamente.
Executing (default): SHOW INDEX FROM `adopcions`
Servidor inicializado en el puerto 4000
Executing (default): SELECT `id`,`nombre`,`edad`,`raza`,`sexo`,`color`,`createdAt`,`updatedAt` FROM `adopcions` AS `adopcion`;
[nodemon] restarting due to changes...
[nodemon] starting node ./src/app.js
Executing (default): SELECT 1+1 AS result
Executing (default): SELECT TABLE_NAME FROM INFORMATION_SCHEMA.TABLES WHERE TABLE_TYPE = 'BASE TABLE' AND TABLE_NAME = 'adopcions' AND TABLE_SCHEMA = 'adopcion'
Conexión a la base de datos establecida correctamente.
Executing (default): SHOW INDEX FROM `adopcions`
Servidor inicializado en el puerto 4000
Executing (default): INSERT INTO `adopcions` (`id`,`nombre`,`edad`,`raza`,`sexo`,`color`,`createdAt`,`updatedAt`) VALUES (DEFAULT,?, ?, ?, ?, ?, ?);
[nodemon] restarting due to changes...
[nodemon] starting node ./src/app.js
Executing (default): SELECT 1+1 AS result
Executing (default): SELECT TABLE_NAME FROM INFORMATION_SCHEMA.TABLES WHERE TABLE_TYPE = 'BASE TABLE' AND TABLE_NAME = 'adopcions' AND TABLE_SCHEMA = 'adopcion'
Conexión a la base de datos establecida correctamente.
Executing (default): SHOW INDEX FROM `adopcions`
Servidor inicializado en el puerto 4000
[nodemon] restarting due to changes...
```

```
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
PS C:\Users\Jhon Chalacan\Documents\Diplomado\tallerbackend> npm run start

> tallerbackend@1.0.0 start
> nodemon ./src/app.js

[nodemon] 3.1.7
[nodemon] to restart at any time, enter `rs`
[nodemon] watching path(s): *.*
[nodemon] watching extensions: js,mjs,cjs,json
[nodemon] starting `node ./src/app.js`
Executing (default): SELECT 1+1 AS result
Executing (default): SELECT TABLE_NAME FROM INFORMATION_SCHEMA.TABLES WHERE TABLE_TYPE = 'BASE TABLE' AND TABLE_NAME = 'adopcions' AND TABLE_SCHEMA = 'adopcion'
Conexión a la base de datos establecida correctamente.
Executing (default): SHOW INDEX FROM `adopcions`
Servidor inicializado en el puerto 4000
Executing (default): SELECT `id`,`nombre`,`edad`,`raza`,`sexo`,`color`,`createdAt`,`updatedAt` FROM `adopcions` AS `adopcion`;
```



```
[nodemon] restarting due to changes...
[nodemon] starting 'node ./src/app.js'
Executing (default): SELECT 1+1 AS result
Executing (default): SELECT TABLE_NAME FROM INFORMATION_SCHEMA.TABLES WHERE TABLE_TYPE = 'BASE TABLE' AND TABLE_NAME = 'adopcions' AND TABLE_SCHEMA = 'adopcion'
Executing (default): SELECT TABLE_NAME FROM INFORMATION_SCHEMA.TABLES WHERE TABLE_TYPE = 'BASE TABLE' AND TABLE_NAME = 'adopcions' AND TABLE_SCHEMA = 'adopcion'
Conexión a la base de datos establecida correctamente.
Executing (default): SHOW INDEX FROM 'adopcions'
Servidor inicializado en el puerto 4000
Executing (default): INSERT INTO 'adopcions' ('id','nombre','edad','raza','sexo','color','createdAt','updatedAt') VALUES (DEFAULT,?, ?, ?, ?, ?, ?, ?);
[nodemon] restarting due to changes...
```

The screenshot shows the VS Code interface with a REST Client file named `requests.http` and a terminal window.

requests.http:

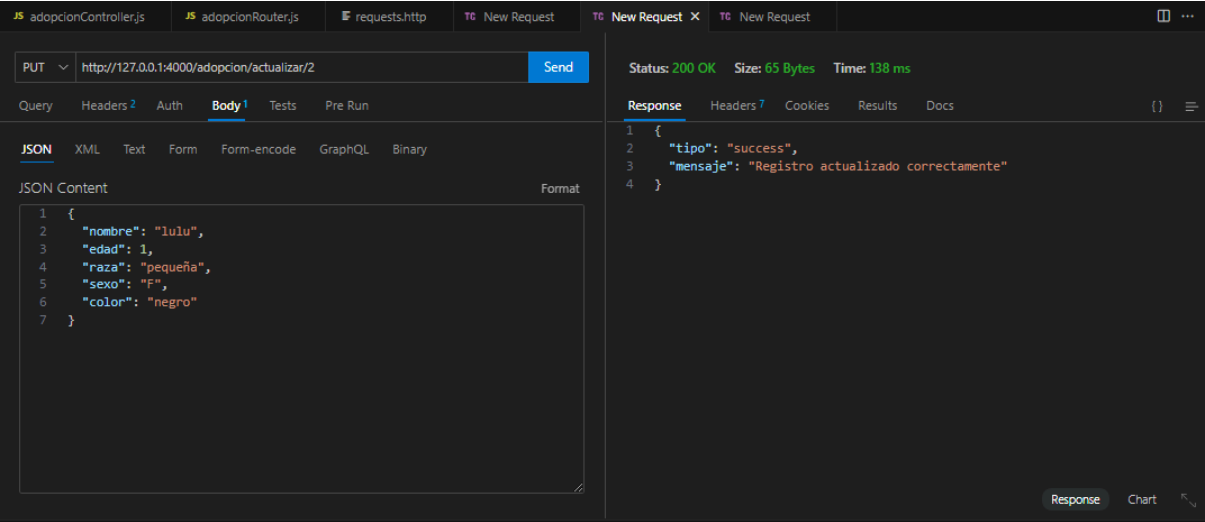
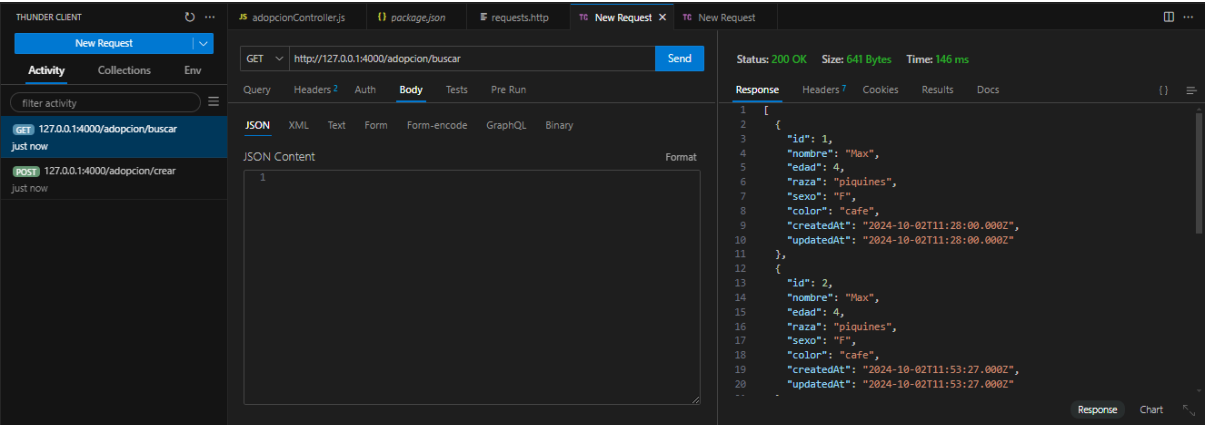
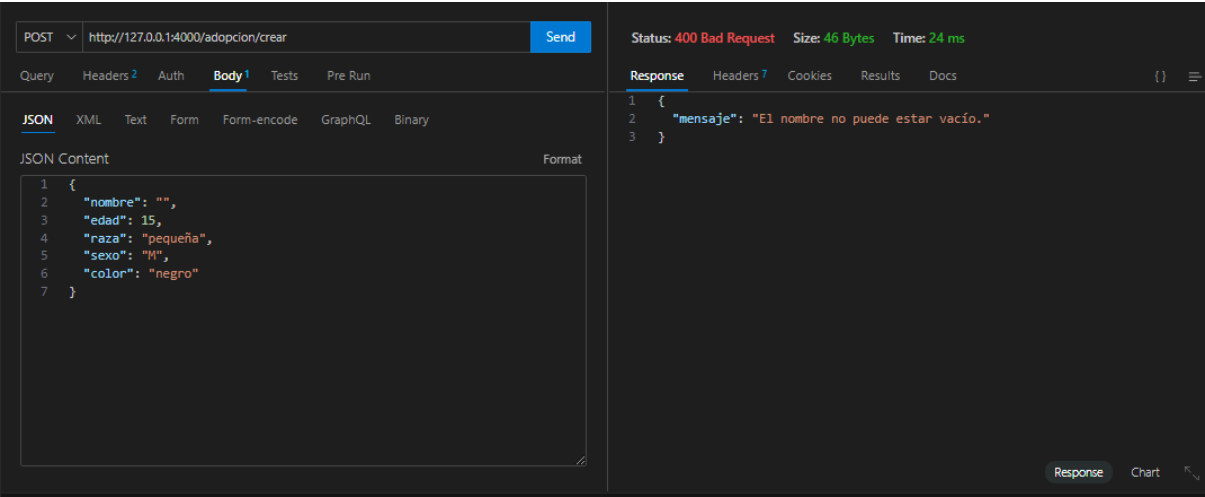
```
1 GET http://127.0.0.1:4000/adopcion/buscar HTTP/1.1
2
3 ###
4 POST http://127.0.0.1:4000/adopcion/crear HTTP/1.1
5 Content-Type: application/json
6
7 {
8   "nombre": "sakura",
9   "edad": 5,
10  "raza": "piquines",
11  "sexo": "F",
12  "color": "cafe con negro"
13 }
14
15 ###
16 PUT http://127.0.0.1:4000/adopcion/actualizar/2 HTTP/1.1
17
18 ###
19 DELETE http://127.0.0.1:4000/adopcion/eliminar/2 HTTP/1.1
20
```

Terminal:

```
Executing (default): SELECT TABLE_NAME FROM INFORMATION_SCHEMA.TABLES WHERE TABLE_TYPE = 'BASE TABLE' AND TABLE_NAME = 'adopcions' AND TABLE_SCHEMA = 'adopcion'
Conexión a la base de datos establecida correctamente.
Executing (default): SHOW INDEX FROM 'adopcions'
Servidor inicializado en el puerto 4000
Executing (default): INSERT INTO 'adopcions' ('id','nombre','edad','raza','sexo','color','createdAt','updatedAt') VALUES (DEFAULT,?, ?, ?, ?, ?, ?, ?);
Executing (default): INSERT INTO 'adopcions' ('id','nombre','edad','raza','sexo','color','createdAt','updatedAt') VALUES (DEFAULT,?, ?, ?, ?, ?, ?, ?);
```

The screenshot shows the DBeaver interface with the 'adopcions' table selected. The table has 3 rows of data.

id	nombre	edad	raza	sexo	color	createdAt	updatedAt
1	Max	4	piquines	F	cafe	2024-10-01	2024-10-01
2	Max	4	piquines	F	cafe	2024-10-01	2024-10-01
3	sakura	5	piquines	F	cafe con negro	2024-10-01	2024-10-01



1	Max	4	piquines	F	cafe
2	Max	4	piquines	F	cafe
3	sakura	5	piquines	F	cafe con negro
4	firulais	15	pequeña	M	negro

1	Max	4	piquines	F	cafe
2	lulu	1	pequeña	F	negro
3	sakura	5	piquines	F	cafe con negro
4	firulais	15	pequeña	M	negro

DELETE

http://127.0.0.1:4000/adopcion/eliminar/2

Send

Query

Headers 2

Auth

Body

Tests

Pre Run

Query Parameters

☐

parameter

value

Status: 200 OK

Size: 63 Bytes

Time: 46 ms

Response

Headers 7

Cookies

Results

Docs

1

{

2

"tipo": "success",

3

"mensaje": "Registro eliminado correctamente"

4

}

1	Max	4	piquines	F	cafe
3	sakura	5	piquines	F	cafe con negro
4	firulais	15	pequeña	M	negro

DELETE

http://127.0.0.1:4000/adopcion/eliminar/12

Send

Query

Headers 2

Auth

Body

Tests

Pre Run

Query Parameters

☐

parameter

value

Status: 404 Not Found

Size: 69 Bytes

Time: 20 ms

Response

Headers 7

Cookies

Results

Docs

1

{

2

"tipo": "error",

3

"mensaje": "No se encontró la mascota para eliminar"

4

}