

ChatGPT

Share

New chat

Search chats

Library

Sora

GPTs

Chats

Node Express SQL Setup

File Upload Preview Guide

Image upload with preview

Image Upload with Preview

React Video Animation

Create table with popover

Dynamic NavItem Icons

Setting Multiple Routes

Property Management Dashbo...

Document Upload Integration

Add View Icon

Form Validation and Enhancem...

Table UI Enhancements

Admin User Form Creation

Reusable Table Component

User List Table MUI

Data based login screen

create a new demo project from node + expres js in creat get, post, put, delete api and profinsal code format all step by step creat and databes sql set all setup profesnaly and code formatting

Updated saved memory

Great! Let's create a professional Node.js + Express.js demo project with GET, POST, PUT, DELETE APIs and an SQL (MySQL) database integration. I'll guide you step-by-step with clean and scalable folder structure, proper formatting, and best practices.

Step 1: Project Setup

1. Create Project Folder

```
bash
mkdir express-sql-demo
cd express-sql-demo
```

2. Initialize package.json

```
bash
npm init -y
```

3. Install Required Packages

```
npm install express mysql2 dotenv body-parser cors
npm install --save-dev nodemon
```

4. Create Folder Structure

```
pgsql
express-sql-demo/
├── config/
│   └── db.config.js
├── controllers/
│   └── user.controller.js
├── routes/
│   └── user.routes.js
├── models/
│   └── user.model.js
├── .env
├── server.js
├── package.json
└── README.md
```

Step 2: Database Setup (MySQL)

```
sql
CREATE DATABASE express_demo;

USE express_demo;

CREATE TABLE users (
  id INT AUTO_INCREMENT PRIMARY KEY,
  name VARCHAR(100),
  email VARCHAR(100) UNIQUE,
  age INT
);
```

Step 3: .env File

```
ini
PORT=5000
DB_HOST=localhost
DB_USER=root
DB_PASSWORD=yourpassword
DB_NAME=express_demo
```

Step 4: Create Config File

```
js
const mysql = require("mysql2");
require("dotenv").config();

const db = mysql.createConnection({
  host: process.env.DB_HOST,
  user: process.env.DB_USER,
  password: process.env.DB_PASSWORD,
  database: process.env.DB_NAME,
});

db.connect((err) => {
  if (err) throw err;
  console.log("✅ Connected to MySQL database.");
});

module.exports = db;
```

✅ Step 5: Model

models/user.model.js

```
js
const db = require("../config/db.config");

const User = {

  getById: (id, callback) => {
    db.query("SELECT * FROM users WHERE id = ?", [id], callback);
  },

  create: (data, callback) => {
    db.query("INSERT INTO users SET ?", data, callback);
  },

  update: (id, data, callback) => {
    db.query("UPDATE users SET ? WHERE id = ?", [data, id], callback);
  },

  delete: (id, callback) => {
    db.query("DELETE FROM users WHERE id = ?", [id], callback);
  },
};

module.exports = User;
```

✅ Step 6: Controller

controllers/user.controller.js

```
js
const User = require("../models/user.model");

exports.getUserById = (req, res) => {
  User.getById(req.params.id, (err, data) => {
    if (err) return res.status(500).send(err);
    res.send(data);
  });
};

exports.createUser = (req, res) => {
  User.create(req.body, (err, result) => {
    if (err) return res.status(500).send(err);
    res.status(201).send({ id: result.insertId, ...req.body });
  });
};

exports.updateUser = (req, res) => {
  User.update(req.params.id, req.body, (err) => {
    if (err) return res.status(500).send(err);
    res.send({ id: req.params.id, ...req.body });
  });
};

exports.deleteUser = (req, res) => {
  User.delete(req.params.id, (err) => {
    if (err) return res.status(500).send(err);
    res.send({ message: "User deleted successfully" });
  });
};
```

✅ Step 7: Routes

routes/user.routes.js

```
js
const express = require("express");
const router = express.Router();
const userController = require("../controllers/user.controller");

router.get("/", userController.getAllUsers);
router.get("/:id", userController.getUserById);
router.post("/", userController.createUser);
router.put("/:id", userController.updateUser);
router.delete("/:id", userController.deleteUser);

module.exports = router;
```

Step 8: Entry Point

server.js

```
js
const express = require("express");
const userRoutes = require("./routes/user.routes");
require("dotenv").config();

const app = express();

app.use(cors());
app.use(bodyParser.json());

app.use("/api/users", userRoutes);

const PORT = process.env.PORT || 5000;
app.listen(PORT, () => console.log("Server is running on port ${PORT}"));
```

Step 9: package.json script

Update scripts:

```
json
"scripts": {
  "start": "node server.js",
  "dev": "nodemon server.js"
}
```

Step 10: Run Your Project

Ask anything

```
bash
npm run dev
```

Sample API Endpoints

Method	Endpoint	Description
GET	/api/users	Get all users
GET	/api/users/:id	Get user by ID
POST	/api/users	Create new user
PUT	/api/users/:id	Update user
DELETE	/api/users/:id	Delete user

Do you want me to generate this as a downloadable ZIP file for you or need Postman collection for testing APIs?

📄 📄 📄 📄 📄 📄

Ask anything

+ 🛠️ Tools

🔊 🔊