



Build Node.js Rest APIs with Express & MySQL

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bezcoder (<https://www.bezkoder.com/author/bezkoder/>)  Node.js
(<https://www.bezkoder.com/category/node-js/>)

Express (<https://expressjs.com/>) is one of the most popular web frameworks for Node.js that supports routing, middleware, view system... This tutorial will guide you through the steps of building Node.js Restful CRUD API using Express and interacting with MySQL database.

Before reading the tutorial, please install MySQL in your machine. The installation instructions can be found at Official MySQL installation manual (<https://dev.mysql.com/doc/refman/5.7/en/installing.html>).

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Application overview

We will build Rest Apis for creating, retrieving, updating & deleting Customers.

First, we start with an Express web server. Next, we add configuration for MySQL database, We use cookies to improve your experience with the site. To find out more you can read the full  create customer model, write the controller. Then we define routes for handling all CRUD 

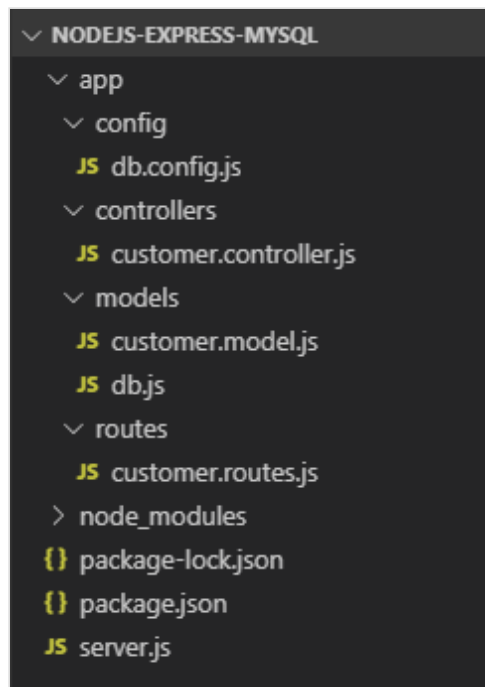
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Methods	Urls	Actions
GET	/customers	get all Customers
GET	/customers/42	get Customer with id=42
POST	/customers	add new Customer
PUT	/customers/42	update Customer with id=42
DELETE	/customers/42	remove Customer with id=42
DELETE	/customers	remove all Customers

Finally, we're gonna test the Rest Apis using Postman.

Our project structure will be like:



Create Node.js application

Open terminal/console, then create a folder for our application:

```
$ mkdir nodejs-express-mysql
$ cd nodejs-express-mysql
```

Initialize the Node.js application with a *package.json* file:



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```

npm init

name: (nodejs-express-mysql)
version: (1.0.0)
description: Node.js Restful CRUD API with Node.js, Express and MySQL
entry point: (index.js) server.js
test command:
git repository:
keywords: nodejs, express, mysql, restapi
author: bezkoder
license: (ISC)

Is this ok? (yes) yes

```

Next, we need to install necessary modules: `express`, `mysql` and `body-parser`.
Run the command:

```
npm install express mysql body-parser --save
```

The `package.json` file should look like this:

```

{
  "name": "nodejs-express-mysql",
  "version": "1.0.0",
  "description": "Node.js Restful CRUD API with Node.js, Express and MySQL",
  "main": "server.js",
  "scripts": {
    "test": "echo \"Error: no test specified\" && exit 1"
  },
  "keywords": [
    "nodejs",
    "express",
    "mysql",
    "restapi"
  ],
  "author": "bezkoder",
  "license": "ISC",
  "dependencies": {
    "body-parser": "^1.19.0",
    "express": "^4.17.1",
    "mysql": "^2.17.1"
  }
}

```



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Setup Express web server <https://www.bezkoder.com/privacy-policy/>

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Now, in the root folder, we create a new file named *server.js*:

```
const express = require("express");
const bodyParser = require("body-parser");

const app = express();

// parse requests of content-type: application/json
app.use(bodyParser.json());

// parse requests of content-type: application/x-www-form-urlencoded
app.use(bodyParser.urlencoded({ extended: true }));

// simple route
app.get("/", (req, res) => {
  res.json({ message: "Welcome to bezkoder application." });
});

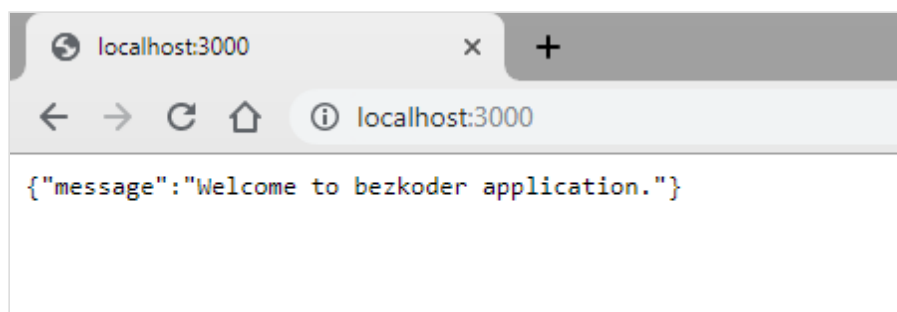
// set port, listen for requests
app.listen(3000, () => {
  console.log("Server is running on port 3000.");
});
```

What we do are:

- import `express` and `body-parser` modules. Express is for building the Rest apis, and `body-parser` (<https://www.npmjs.com/package/body-parser>) helps to parse the request and create the `req.body` object that we will need to access in our routes.
- create an Express app, then add `body-parser` middlewares using `app.use()` method.
- define a GET route which is simple for test.
- listen on port 3000 for incoming requests.

Now we can run the app with command: `node server.js`.

Open your browser, enter the url `http://localhost:3000/` (`http://localhost:3000/`), you will see:



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Create MySQL table

Before connecting Node.js Application with MySQL, we need a table first.
So run the SQL script below to create `customers` table:

```
CREATE TABLE IF NOT EXISTS `customers` (  
  id int(11) NOT NULL PRIMARY KEY AUTO_INCREMENT,  
  email varchar(255) NOT NULL,  
  name varchar(255) NOT NULL,  
  active BOOLEAN DEFAULT false  
) ENGINE=InnoDB DEFAULT CHARSET=utf8;
```

Configure & Connect to MySQL database

We're gonna have a separate folder for configuration. Let's create `config` folder in the `app` folder, under application root folder, then create `db.config.js` file inside that `config` folder with content like this:

```
module.exports = {  
  HOST: "localhost",  
  USER: "root",  
  PASSWORD: "123456",  
  DB: "testdb"  
};
```

Now create a database connection that uses configuration above.

The file for connection is `db.js`, we put it in `app/models` folder that will contain model in the next step.



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

// Create a connection to the database
const connection = mysql.createConnection({
  host: dbConfig.HOST,
  user: dbConfig.USER,
  password: dbConfig.PASSWORD,
  database: dbConfig.DB
});

// open the MySQL connection
connection.connect(error => {
  if (error) throw error;
  console.log("Successfully connected to the database.");
});

module.exports = connection;
```

Define the Model

In *models* folder, create a file called *customer.model.js*. We're gonna define constructor for *Customer* object here, and use the database connection above to write CRUD functions:

- create a new Customer
- find a Customer by id
- get all Customers
- update a Customer by id
- remove a Customer
- remove all Customers

This is the content inside *customer.model.js*:



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```

const sql = require("./db.js");

// constructor
const Customer = function(customer) {
  this.email = customer.email;
  this.name = customer.name;
  this.active = customer.active;
};

Customer.create = (newCustomer, result) => {
  sql.query("INSERT INTO customers SET ?", newCustomer, (err, res) => {
    if (err) {
      console.log("error: ", err);
      result(err, null);
      return;
    }

    console.log("created customer: ", { id: res.insertId, ...newCustomer });
    result(null, { id: res.insertId, ...newCustomer });
  });
};

Customer.findById = (customerId, result) => {
  sql.query(`SELECT * FROM customers WHERE id = ${customerId}`, (err, res) => {
    if (err) {
      console.log("error: ", err);
      result(err, null);
      return;
    }

    if (res.length) {
      console.log("found customer: ", res[0]);
      result(null, res[0]);
      return;
    }

    // not found Customer with the id
    result({ kind: "not_found" }, null);
  });
};

```

```
Customer.getAll = result => {
```

```
  sql.query("SELECT * FROM customers", (err, res) => {
```

```
    if (err) {
```

```
      console.log("error: ", err);
```

```
      result(null, err);
```



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```

        return;
    }

    console.log("customers: ", res);
    result(null, res);
  });
};

Customer.updateById = (id, customer, result) => {
  sql.query(
    "UPDATE customers SET email = ?, name = ?, active = ? WHERE id = ?",
    [customer.email, customer.name, customer.active, id],
    (err, res) => {
      if (err) {
        console.log("error: ", err);
        result(null, err);
        return;
      }

      if (res.affectedRows == 0) {
        // not found Customer with the id
        result({ kind: "not_found" }, null);
        return;
      }

      console.log("updated customer: ", { id: id, ...customer });
      result(null, { id: id, ...customer });
    }
  );
};

```

```

Customer.remove = (id, result) => {
  sql.query("DELETE FROM customers WHERE id = ?", id, (err, res) => {
    if (err) {
      console.log("error: ", err);
      result(null, err);
      return;
    }

    if (res.affectedRows == 0) {
      // not found Customer with the id
      result({ kind: "not_found" }, null);
      return;
    }
  });
};

```



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console.log("deleted customer with id: ", id);

```

        result(null, res);
    });
};

Customer.removeAll = result => {
    sql.query("DELETE FROM customers", (err, res) => {
        if (err) {
            console.log("error: ", err);
            result(null, err);
            return;
        }

        console.log(`deleted ${res.affectedRows} customers`);
        result(null, res);
    });
};

module.exports = Customer;

```

Customer model is simple, it contains fields: email, name & active.

We use database connection `query()` method to execute MySQL script: INSERT, SELECT, UPDATE, DELETE. You can find more details about `mysql` module at: <https://www.npmjs.com/package/mysql> (<https://www.npmjs.com/package/mysql>).

Define Routes

When a client sends request for an endpoint using HTTP request (GET, POST, PUT, DELETE), we need to determine how the server will reponse. It's why we're gonna setup the routes.

These are routes we define:

- `/customers` : GET, POST, DELETE
- `/customers/:customerId` : GET, PUT, DELETE

Create a *routes* folder inside *app* folder, then create *customer.routes.js* file with content like this:



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```

module.exports = app => {
  const customers = require("../controllers/customer.controller.js");

  // Create a new Customer
  app.post("/customers", customers.create);

  // Retrieve all Customers
  app.get("/customers", customers.findAll);

  // Retrieve a single Customer with customerId
  app.get("/customers/:customerId", customers.findOne);

  // Update a Customer with customerId
  app.put("/customers/:customerId", customers.update);

  // Delete a Customer with customerId
  app.delete("/customers/:customerId", customers.delete);

  // Create a new Customer
  app.delete("/customers", customers.deleteAll);
};

```

You can see that we use a controller from `/controllers/customer.controller.js`. It contains methods for handling CRUD operations and will be created in the next step.

We also need to include routes in `server.js` (right before `app.listen()`):

```

...

require("../app/routes/customer.routes.js")(app);

app.listen(...);

```

Create the Controller

Now we create a *controllers* folder inside *app* folder, then we have a file named *customer.controller.js*. Our controller will be written inside this with CRUD functions:

- create
- findAll
- findOne



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- delete
- deleteAll

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```
const Customer = require("../models/customer.model.js");

// Create and Save a new Customer
exports.create = (req, res) => {

};

// Retrieve all Customers from the database.
exports.findAll = (req, res) => {

};

// Find a single Customer with a customerId
exports.findOne = (req, res) => {

};

// Update a Customer identified by the customerId in the request
exports.update = (req, res) => {

};

// Delete a Customer with the specified customerId in the request
exports.delete = (req, res) => {

};

// Delete all Customers from the database.
exports.deleteAll = (req, res) => {

};
```

Let's implement these functions.

Create a new object

Create and Save a new Customer:



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```

exports.create = (req, res) => {
  // Validate request
  if (!req.body) {
    res.status(400).send({
      message: "Content can not be empty!"
    });
  }

  // Create a Customer
  const customer = new Customer({
    email: req.body.email,
    name: req.body.name,
    active: req.body.active
  });

  // Save Customer in the database
  Customer.create(customer, (err, data) => {
    if (err)
      res.status(500).send({
        message:
          err.message || "Some error occurred while creating the Customer."
      });
    else res.send(data);
  });
};

```

Retrieve all objects

Retrieve all Customers from the database:

```

exports.findAll = (req, res) => {
  Customer.getAll((err, data) => {
    if (err)
      res.status(500).send({
        message:
          err.message || "Some error occurred while retrieving customers."
      });
    else res.send(data);
  });
};

```



Retrieve a single object

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Find a single Customer with a customerId:

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```
exports.findOne = (req, res) => {
  Customer.findById(req.params.customerId, (err, data) => {
    if (err) {
      if (err.kind === "not_found") {
        res.status(404).send({
          message: `Not found Customer with id ${req.params.customerId}.`
        });
      } else {
        res.status(500).send({
          message: "Error retrieving Customer with id " + req.params.customerId
        });
      }
    } else res.send(data);
  });
};
```

Update an object

Update a Customer identified by the `customerId` in the request:



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```
exports.update = (req, res) => {
  // Validate Request
  if (!req.body) {
    res.status(400).send({
      message: "Content can not be empty!"
    });
  }

  Customer.updateById(
    req.params.customerId,
    new Customer(req.body),
    (err, data) => {
      if (err) {
        if (err.kind === "not_found") {
          res.status(404).send({
            message: `Not found Customer with id ${req.params.customerId}.`
          });
        } else {
          res.status(500).send({
            message: "Error updating Customer with id " + req.params.customerId
          });
        }
      } else res.send(data);
    }
  );
};
```

Delete an object

Delete a Customer with the specified `customerId` in the request:



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```

exports.delete = (req, res) => {
  Customer.remove(req.params.customerId, (err, data) => {
    if (err) {
      if (err.kind === "not_found") {
        res.status(404).send({
          message: `Not found Customer with id ${req.params.customerId}.`
        });
      } else {
        res.status(500).send({
          message: "Could not delete Customer with id " + req.params.customerId
        });
      }
    } else res.send({ message: `Customer was deleted successfully!` });
  });
};

```

Delete all objects

Delete all Customers from the database:

```

exports.deleteAll = (req, res) => {
  Customer.removeAll((err, data) => {
    if (err)
      res.status(500).send({
        message:
          err.message || "Some error occurred while removing all customers."
      });
    else res.send({ message: `All Customers were deleted successfully!` });
  });
};

```

Test the APIs

Run our Node.js application with command: `node server.js`.

The console shows:

```

Server is running on port 3000.
Successfully connected to the database.

```

Using Postman, we're gonna test all the APIs above.

1. Create a new Customer using POST `/customers` Api

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POST http://localhost:3000/customers

Params Authorization Headers (9) **Body** Pre-request Script Tests Settings

none form-data x-www-form-urlencoded **raw** binary GraphQL BETA JSON

```

1 {
2   "email": "bezkode@gmail.com",
3   "name": "zKoder",
4   "active": true
5 }

```

Body Cookies Headers (6) Test Results Status: 200 OK Time: 431ms

Pretty Raw Preview Visualize BETA JSON

```

1 {
2   "id": 1,
3   "email": "bezkode@gmail.com",
4   "name": "zKoder",
5   "active": true
6 }

```

After creating some new Customers, we can check MySQL table:

```
mysql> SELECT * FROM customers;
```

id	email	name	active
1	bezkode@gmail.com	zKoder	1
2	jack123@gmail.com	Jack	0
3	drhelen@gmail.com	Helen	0

2. Retrieve all Customers using GET /customers Api



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GET ▼ http://localhost:3000/customers

Params Authorization Headers (7) Body Pre-request Script Tests Settings

Query Params

KEY	VALUE	DESCRIPTION
Key	Value	Description

Body Cookies Headers (6) Test Results Status: 200 OK Time: 39ms

Pretty Raw Preview Visualize BETA JSON ≡

```

1  [
2    {
3      "id": 1,
4      "email": "bezkoder@gmail.com",
5      "name": "zKoder",
6      "active": 1
7    },
8    {
9      "id": 2,
10     "email": "jack123@gmail.com",
11     "name": "Jack",
12     "active": 0
13   },
14   {
15     "id": 3,
16     "email": "drhelen@gmail.com",
17     "name": "Helen",
18     "active": 0
19   }
20 ]

```

3. Retrieve a single Customer by id using GET /customers/:customerId Api

GET ▼ http://localhost:3000/customers/2

Params Authorization Headers (7) Body Pre-request Script Tests Settings

Query Params

KEY	VALUE	DESCRIPTION
Key	Value	Description

Body Cookies Headers (6) Test Results Status: 200 OK Time: 31ms

Pretty Raw Preview Visualize BETA JSON ≡

```

1  {
2    "id": 2,
3    "email": "jack123@gmail.com",
4    "name": "Jack",
5    "active": 0
6  }

```

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4. Update a Customer using PUT /customers/:customerId Api

PUT ▼ http://localhost:3000/customers/3

Params Authorization Headers (9) **Body** Pre-request Script Tests Settings

☐ none ☐ form-data ☐ x-www-form-urlencoded ☒ raw ☐ binary ☐ GraphQL BETA **JSON** ▼

```

1 {
2   "email": "drhelen@gmail.com",
3   "name": "Dr.Helen",
4   "active": true
5 }

```

Body Cookies Headers (6) Test Results Status: 200 OK Time: 306ms

Pretty Raw Preview Visualize BETA **JSON**

```

1 {
2   "id": "3",
3   "email": "drhelen@gmail.com",
4   "name": "Dr.Helen",
5   "active": true
6 }

```

Check customers table after a row was updated:

```
mysql> SELECT * FROM customers;
```

id	email	name	active
1	bezkoder@gmail.com	zKoder	1
2	jack123@gmail.com	Jack	0
3	drhelen@gmail.com	Dr.Helen	1

5. Delete a Customer using DELETE /customers/:customerId Api



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DELETE ▼ http://localhost:3000/customers/2

Params Authorization Headers (8) Body Pre-request Script Tests Settings

Query Params

KEY	VALUE	DESCRIPTION
Key	Value	Description

Body Cookies Headers (6) Test Results Status: 200 OK Time: 15ms

Pretty Raw Preview Visualize BETA JSON ▼ ↺

```

1 {
2   "message": "Customer was deleted successfully!"
3 }

```

Customer with id=2 was removed from customers table:

```
mysql> SELECT * FROM customers;
+----+-----+-----+-----+
| id | email                | name    | active |
+----+-----+-----+-----+
| 1  | bezkoder@gmail.com   | zKoder  | 1      |
| 3  | drhelen@gmail.com    | Dr.Helen | 1      |
+----+-----+-----+-----+
```

6. Delete all Customers using DELETE /customers Api

DELETE ▼ http://localhost:3000/customers

Params Authorization Headers (8) Body Pre-request Script Tests Settings

Query Params

KEY	VALUE	DESCRIPTION
Key	Value	Description

Body Cookies Headers (6) Test Results Status: 200 OK Time: 28ms

Pretty Raw Preview Visualize BETA JSON ▼ ↺

```

1 {
2   "message": "All Customers were deleted successfully!"
3 }

```

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Now there are 0 rows in customers table.

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```
mysql> SELECT * FROM customers;
Empty set (0.00 sec)
```

Conclusion

Today, we've learned how to create Node.js Rest APIs with an Express web server. We also know way to add configuration for MySQL database, create a model, write a controller and define routes for handling all CRUD operations.

You can find more interesting thing in the next tutorial:

- Deploying/Hosting Node.js app on Heroku with MySQL database (<https://bezkoder.com/deploy-node-js-app-heroku-cleardb-mysql/>)
- Dockerize Node.js Express and MySQL example – Docker Compose (<https://www.bezkoder.com/docker-compose-nodejs-mysql/>)

If you want to use Sequelize to reduce boilerplate code, there is a post for this:

Node.js Rest APIs example with Express, Sequelize & MySQL (<https://bezkoder.com/node-js-express-sequelize-mysql/>)

Happy learning! See you again.

Further Reading

- Express.js Routing (<https://expressjs.com/en/guide/routing.html>)
- <https://www.npmjs.com/package/express> (<https://www.npmjs.com/package/express>)
- <https://www.npmjs.com/package/body-parser> (<https://www.npmjs.com/package/body-parser>)
- <https://www.npmjs.com/package/mysql> (<https://www.npmjs.com/package/mysql>)
- Upload/store images in MySQL using Node.js, Express & Multer (<https://www.bezkoder.com/node-js-upload-image-mysql/>)
- Node.js Express File Upload Rest API example using Multer (<https://www.bezkoder.com/node-js-express-file-upload/>)

Source code

You can find the complete source code for this example on Github (<https://github.com/bezkoder/nodejs-express-mysql>).

[crud](https://www.bezkoder.com/tag/crud/) (<https://www.bezkoder.com/tag/crud/>) [express](https://www.bezkoder.com/tag/express/) (<https://www.bezkoder.com/tag/express/>)

[mysql](https://www.bezkoder.com/tag/mysql/) (<https://www.bezkoder.com/tag/mysql/>) [node.js](https://www.bezkoder.com/tag/node-js/) (<https://www.bezkoder.com/tag/node-js/>)



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167 thoughts to “Build Node.js Rest APIs with Express & MySQL”



prowebkarawang

October 4, 2019 at 10:36 am (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-7>)

The tutorial is concise and clear and very helpful, thanks.

REPLY



bezkoder

October 6, 2019 at 6:38 am (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-8>)

Hi, thank you 😊

Hope it help you.

REPLY



Suju

September 9, 2020 at 10:48 am (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-4660>)

Very helpful, thanks bro.

REPLY



Lesego

September 18, 2020 at 8:55 am (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-4774>)

Thank you very much, this was very helpful. From now on my project will be structured in this fashion

REPLY



Roger

January 26, 2021 at 9:42 pm (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-6566>)

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Hi. This is good stuff, what's the name of this pattern?

REPLY

KIRANDEEP KAUR

August 4, 2020 at 12:24 am (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-4199>)

where to create the object as I am learning don't have much knowledge

REPLY

Federico

October 24, 2019 at 2:21 am (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-25>)

You're really awesome bro!

REPLY

bezcoder

October 24, 2019 at 3:18 am (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-26>)

Hi, thank you for your comment! ?

Hope this help.

REPLY

gus abas

October 27, 2019 at 12:24 pm (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-31>)

i have a problem when i try, the message is "cannot find module

'..controllers/customer.contorller.js"

please help

REPLY



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October 27, 2019 at 1:43 pm (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-32>)

Hi, there is a typo: `contorller` . It should be `customer.controller.js` .

REPLY

fobb

April 9, 2020 at 3:11 pm (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-806>)

I still get error of reading req.body

REPLY

bezkodeer

April 10, 2020 at 12:16 pm (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-812>)

Make sure that you set `'Content-Type': 'application/json'` for HTTP request Header.

REPLY

Pankaj

April 22, 2020 at 10:55 am (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-1207>)

Cannot POST /customers when testing api

bezkodeer

April 22, 2020 at 10:56 pm (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-1285>)

Maybe you forgot to add Content Type to HTTP header.

Junior

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December 16, 2020 at 4:11 pm (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-5816>)

I was wrong to declare the body-parser after the routes. Try this:




```
const app = express();
app.use(bodyParser.urlencoded({ extended: true }));
app.use(bodyParser.json());
require("./app/routes/customer.routes.js")(app);
```

REPLY

Roger

October 29, 2019 at 9:05 am (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-33>)

I got a problem when i post a request to save new customers

```
_http_outgoing.js:470
  throw new ERR_HTTP_HEADERS_SENT('set');
      ^
```

```
Error [ERR_HTTP_HEADERS_SENT]: Cannot set headers after they are sent to the client
    at ServerResponse.setHeader (_http_outgoing.js:470:11)
    at ServerResponse.header (D:\NodeJS\webtuthien\node_modules\express\lib\response.js:100:10)
    at ServerResponse.send (D:\NodeJS\webtuthien\node_modules\express\lib\response.js:100:10)
    at done (D:\NodeJS\webtuthien\node_modules\express\lib\response.js:100:10)
    at Immediate.<anonymous> (D:\NodeJS\webtuthien\node_modules\express-handlebars\lib\index.js:18:18)
    at runCallback (timers.js:705:18)
    at tryOnImmediate (timers.js:676:5)
    at processImmediate (timers.js:658:5)
```

REPLY

bezkoder

October 29, 2019 at 2:47 pm (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-35>)

Hi, please show me more details about your HTTP POST request.

REPLY

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Bhargavi Balusu

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Hi,
What are the headers you have used. because i tried to do POST, but got this message,
{
"message": "ER_BAD_NULL_ERROR: Column 'username' cannot be null"
}

REPLY

bezcoder

June 4, 2020 at 1:22 pm (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-3103>)

Hi, it is Content-type: application/json 😊

REPLY

golavo

November 7, 2019 at 9:46 am (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-37>)

Very helpful, thanks for this tutorial.

REPLY

Axel

December 31, 2019 at 4:51 am (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-128>)

Hello

im dealing with another issue and can't figure it out

Server is running on port 3000.

Successfully connected to the database.

error: Error: ER_BAD_NULL_ERROR: Column 'email' cannot be null

at Query.Sequence._packetToError (/home/axel/nodejs-express-mysql/node_modules/mysql/lib/protocol/sequences/Sequence.js:47:14)

at Query.ErrorPacket (/home/axel/nodejs-express-mysql/node_modules/mysql/lib/protocol/sequences/Query.js:77:18)

at Protocol.parsePacket (/home/axel/nodejs-express-mysql/node_modules/mysql/lib/protocol/Protocol.js:291:23)

at Parser._parsePacket (/home/axel/nodejs-express-mysql/node_modules/mysql/lib/protocol/Parser.js:423:14)

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```

mysql/node_modules/mysql/lib/protocol/Parser.js:433:10)
at Parser.write (/home/axel/nodejs-express-
mysql/node_modules/mysql/lib/protocol/Parser.js:43:10)
at Protocol.write (/home/axel/nodejs-express-
mysql/node_modules/mysql/lib/protocol/Protocol.js:38:16)
at Socket. (/home/axel/nodejs-express-
mysql/node_modules/mysql/lib/Connection.js:91:28)
at Socket. (/home/axel/nodejs-express-
mysql/node_modules/mysql/lib/Connection.js:525:10)
at Socket.emit (events.js:305:20)
at addChunk (_stream_readable.js:341:12)
-----
at Protocol._enqueue (/home/axel/nodejs-express-
mysql/node_modules/mysql/lib/protocol/Protocol.js:144:48)
at Connection.query (/home/axel/nodejs-express-
mysql/node_modules/mysql/lib/Connection.js:201:25)
at Function.Customer.create (/home/axel/nodejs-express-
mysql/app/models/customer.model.js:11:7)
at exports.create (/home/axel/nodejs-express-
mysql/app/controllers/customer.controller.js:20:12)
at Layer.handle [as handle_request] (/home/axel/nodejs-express-
mysql/node_modules/express/lib/router/layer.js:95:5)
at next (/home/axel/nodejs-express-
mysql/node_modules/express/lib/router/route.js:137:13)
at Route.dispatch (/home/axel/nodejs-express-
mysql/node_modules/express/lib/router/route.js:112:3)
at Layer.handle [as handle_request] (/home/axel/nodejs-express-
mysql/node_modules/express/lib/router/layer.js:95:5)
at /home/axel/nodejs-express-mysql/node_modules/express/lib/router/index.js:281:22
at Function.process_params (/home/axel/nodejs-express-
mysql/node_modules/express/lib/router/index.js:335:12) {
  code: 'ER_BAD_NULL_ERROR',
  errno: 1048,
  sqlMessage: "Column 'email' cannot be null",
  sqlState: '23000',
  index: 0,
  sql: 'INSERT INTO customers SET `email` = NULL, `name` = NULL, `active` = NULL'
}

```

Thanks

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REPLY

bezcoder

January 1, 2020 at 1:12 am (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-130>)

Hi, please tell me which HTTP request along with payload you sent to the server.

REPLY

Rosapink

January 25, 2020 at 6:30 am (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-254>)

You have to set headers for content-type: application/json & content-type: x-www-form-urlencoded

REPLY

Deni

January 30, 2020 at 1:17 am (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-272>)

my problem same with Axel, how to fix it? please...

REPLY

bezcoder

January 30, 2020 at 8:12 am (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-273>)

Maybe you forgot to set headers for content-type: application/json & content-type: x-www-form-urlencoded on REST Client requests 😊

REPLY

hope

February 5, 2020 at 6:55 pm (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-304>)

Where do I set headers? I'm confused



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bezkodeer

February 6, 2020 at 2:20 am (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-305>)

Hi, for example, with Postman, you can see **Header** tab (besides **Body** tab) where we set header for HTTP request 😊

Yasir

April 27, 2020 at 10:22 am (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-1680>)

Thanks r million

REPLY

Roberta

January 13, 2020 at 8:42 am (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-186>)

Thank You for the tutorial! Helped a lot!

REPLY

Roberta

January 14, 2020 at 12:59 pm (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-194>)

For making many to many relationship need to use Sequelize or can make it without it?

REPLY

bezkodeer

January 16, 2020 at 7:58 am (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-206>)

Yes, you can make many-to-many relationship with table structure as Sequelize. But you will need to write more boilerplate.

REPLY



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Nick

February 6, 2020 at 9:53 am (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-306>)

Thank you for the tutorial, it really helps me a lot! I'm still a beginner so there are some parts I don't understand.

Can you please explain to me what the "result" function does in the models? And why does it need two parameters?

[REPLY](#)**bezkoder**

February 6, 2020 at 10:06 am (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-307>)

Hi, one for data, and one for error data 😊

[REPLY](#)**Nick**

February 6, 2020 at 10:12 am (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-308>)

Where do the data go from there? Are they linked to the controller?

Thanks in advance!

[REPLY](#)**bezkoder**

February 7, 2020 at 3:48 pm (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-327>)

Yeah, they are linked to the controller.

For example:

```
Customer.getAll = result => {  
  ...  
  result(null, err);  
  ...  
};
```

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Now look at functions in controller:

```
Customer.getAll((err, data) => { ... })
```

You can see that we use `(err, data) => { ... }` as result .
The `result` parameter of `getAll()` is a function.
In other words, we pass a function to `getAll()` as parameter.

REPLY

Nick

February 10, 2020 at 7:27 am (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-334>)

Thanks for the explanation! 😊

bezkoder

February 10, 2020 at 10:03 am (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-336>)

You're welcome 😊

Agustin Martinez

July 1, 2021 at 12:33 am (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-9381>)

Shouldn't it be, in case of error, like this: `result (err, null)`. ?

NewBie

May 25, 2020 at 6:55 pm (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-2931>)

coming from OOP where all variables are strictly defined for certain type, for example ``DbConnection x``, it's very hard to adapt to Node's free-style arbitrary declaration and what it implies. Do you have any articles to help jump-start?

Thank you very much in advanced.

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REPLY

bezkode

May 26, 2020 at 4:11 am (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-2937>)

Hi, thanks for your suggestion.

Currently I don't have much time to write many tutorials that you and other people need (although I really want to do).

I will try to work for new Typescript style in the future 😊

REPLY

Santhosh sandy

October 25, 2020 at 6:37 am (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-5192>)

Firstly Thank you for all your beautiful tutorials. If you got time, Please try to post a Node.js, MySQL RestApi CRUD app using typescript.

Jo

February 9, 2020 at 6:57 pm (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-332>)

Thanks Bezkoder – great tutorial, super helpful!

REPLY

sami

February 17, 2020 at 10:03 am (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-367>)

Great tutorial. Can we add user authentication layer with jwt to this customers module?

REPLY

bezkode

February 17, 2020 at 11:14 pm (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-370>)

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Node.js & JWT – Token Based Authentication & Authorization example
(<https://www.bezkoder.com/node-js-jwt-authentication-mysql/>)



REPLY

abn

February 24, 2020 at 9:40 am (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-406>)

The tutorial is concise and clear and very helpful, thanks.

yet If there another table 'Product' so that a customer has one or many product and I want to return a customer with its products, how could I proceed?

REPLY

bezkoder

February 24, 2020 at 10:45 am (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-407>)

Hi, I will write a tutorial for your suggestion when having time 😊

REPLY

CoolKat

March 15, 2020 at 2:12 am (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-537>)

I cloned the project from GitHub, and created the MySQL table exactly like it was done in the tutorial, but when I try to post a new customer using Postman, I receive the error:

```
{  
  "message": "ER_BAD_NULL_ERROR: Column 'email' cannot be null"  
}
```

If I manually put data into MySQL and perform a GET request, I get the data correct data, so something seems to not be working with POST.

REPLY

bezkoder

March 17, 2020 at 2:24 am (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-551>)

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Hi, did you set appropriate Header: Content-Type: application/json when sending POST request? [Privacy & Policy \(https://www.bezkoder.com/privacy-policy/\)](https://www.bezkoder.com/privacy-policy/) Accept

REPLY

anjana

June 30, 2020 at 10:45 am (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-3539>)

Did you find solution?

REPLY

joseph

June 13, 2021 at 6:45 pm (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-9061>)

in postman, next to the "graphql", by default it says "text". make clic that "Text" option and choose "Json". I had the same mistake and it fixed it. note that in the screenshot it already says "JSON" so you have to make it look like that on your postman

REPLY

Vadim

March 17, 2020 at 9:36 am (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-552>)

Great tutorial! Exactly what I've been searching for. Thank you!

REPLY

Ebadullah

March 23, 2020 at 6:08 pm (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-609>)

i got a problem when i get a customer by id
"message": " Error retrieving customer with id 2"
please help

REPLY



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bezcoder

March 24, 2020 at 3:00 am (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-616>)

Hi, please make sure that there is a Customer with id=2.

[REPLY](#)**minato**

March 26, 2020 at 6:52 pm (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-653>)

Thank you for this Node CRUD with MySQL tutorial, very inspiring!

[REPLY](#)**Febrian**

March 29, 2020 at 8:18 am (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-672>)

Great tutorial and very helpful. thank you 😊

[REPLY](#)**Kayode**

March 31, 2020 at 1:53 pm (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-695>)

Very straight forward and helpful. Thank you.

[REPLY](#)**Iron Man**

April 4, 2020 at 4:45 am (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-725>)

Great tutorial. I am not even Node developer but i got the Job done. Thanks A lots man

[REPLY](#)

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Rohit Nikam (Rowhit)

April 8, 2020 at 6:05 am (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-781>)

This is very nice and clean and neat tutorial, thank you!

but i have one error, After run node server.js command it shows:

Server is running on port no 3000

Successfully connected to the database!

Using Postman, i test the create new Customers APIs it gives me error in response:

```
{  
  "message": "ER_NO_DB_ERROR: No database selected"  
}
```

Please kindly share your response.

REPLY

Rohit Nikam (Rowhit)

April 8, 2020 at 6:52 am (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-783>)

In node mysql, the properties are called database, not db.

// Create a connection to the database

```
const connection = mysql.createConnection({  
  host: dbConfig.HOST,  
  user: dbConfig.USER,  
  password: dbConfig.PASSWORD,  
  db: dbConfig.DB  
});
```

So, change your config to:

```
// Create a connection to the database  
const connection = mysql.createConnection({  
  host: dbConfig.HOST,  
  user: dbConfig.USER,  
  password: dbConfig.PASSWORD,  
  database: dbConfig.DB //This was changed  
});
```

We use cookies to improve your experience with the site. To find out more, you can read the full [Privacy & Policy](#). So sorry it's my mistake, and thanks again for this tutorial.

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REPLY

bezcoder

April 8, 2020 at 10:24 am (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-788>)

Yeah, I'm so happy to hear that 😊

REPLY

Rohit Nikam (Rowhit)

April 9, 2020 at 11:45 am (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-801>)

Hey bezcoder,

You have any tutorial for promise and promise chain concept using node

REPLY

bezcoder

April 11, 2020 at 2:44 am (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-828>)

Hi, I will write them when having time 😊

Therese

April 9, 2020 at 11:49 am (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-802>)

Hi! Thanks for a very useful tutorial. Im currently creating a React.js project and i am going to use this tutorial connecting to the client side. Right now i have one frontend folder and this backend folder (this tutorial) but are unsure the best way to connect those two? Thankful for any help..

REPLY

bezcoder

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Hi, you can find the fullstack example that uses React as frontend and Node.js Express as backend at the post:

React + Node.js + Express + MySQL example: Build a CRUD App
(<https://bezcoder.com/react-node-express-mysql/>)

REPLY

Bruder

April 22, 2020 at 9:57 pm (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-1280>)

Very clear, easy to implement step by step. This is one of the best Node.js with MySQL tutorials I've ever seen.

Thank you!

REPLY

Emil Mammadov

April 23, 2020 at 4:25 pm (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-1413>)

Thank you very much. That was the best.

REPLY

Nixon Augustine

April 29, 2020 at 11:13 am (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-1763>)

Hi, Wonderful tutorial. Really Appreciate the time you took to write the Tutorial.
I have doubt

```
require("./app/routes/customer.routes.js")(app);
```

is this statement correct ? why is require not assigned to a variable. And (app) is mentioend at the end ?

REPLY



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April 29, 2020 at 11:46 pm (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-1799>)

Hi, you can see that in *app/routes/customer.routes.js*, we export a function:

```
module.exports = app => {  
  ...  
}  
  
// or:  
const func = app => {  
  ...  
}  
  
module.exports = func;
```

So the `require("./app/routes/customer.routes.js")(app)` is equivalent to:

```
const routeFunction = require("./app/routes/customer.routes.js");  
routeFunction(app);
```

REPLY

NewBie

May 23, 2020 at 11:40 pm (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-2837>)

I'm a newbie, still don't get it. `routeFunction()` takes parameter?

my understanding is `require()` is the combination of declaration and instantiation of a class, for example

```
myObj app = myObj();
```

REPLY

bezcoder

May 23, 2020 at 11:49 pm (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-2839>)

A function is an object, so it can be a function 😊

REPLY



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NewBie

May 25, 2020 at 5:33 pm (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-2928>)

Thank you for explaining. So the two `app` are different.

can `module.exports = app => {}` be interpreted as `module.exports = (app) => {}`?

bezkoder

May 26, 2020 at 4:09 am (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-2936>)

Yeah, they are the same 😊

NewBie

May 23, 2020 at 11:55 pm (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-2841>)

or, is it equivalent to this?

```
const routeFunction = require("./app/routes/customer.routes.js");
```

```
app.use('/', routeFunction);
```

REPLY

bezkoder

May 24, 2020 at 1:37 am (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-2867>)

Ah no, you can see that, in `./app/routes/customer.routes.js` we export the function:

```
module.exports = app => {  
  app.post("/customers", customers.create);  
  app.get("/customers", customers.findAll);  
  app.get("/customers/:customerId", customers.findOne);  
  app.put("/customers/:customerId", customers.update);  
  app.delete("/customers/:customerId", customers.delete);  
  app.delete("/customers", customers.deleteAll);  
};
```



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```
const routeFunction = require("./app/routes/customer.routes.js");
routeFunction(app);
```

Then the result will be:

```
app.post("/customers", customers.create);
app.get("/customers", customers.findAll);
app.get("/customers/:customerId", customers.findOne);
app.put("/customers/:customerId", customers.update);
app.delete("/customers/:customerId", customers.delete);
app.delete("/customers", customers.deleteAll);
```

Ali

February 3, 2021 at 3:16 pm (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-6780>)

i am also doubtful at this line, and one more thing is
if

```
require("./app/routes/customer.routes.js")(app);
require("./app/routes/order.routes.js")(app);
```

data from order.routes.js is not displaying.
why ? and how to declare multiple routes?

REPLY

Nixon Augustine

April 29, 2020 at 11:39 am (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-1764>)

This is an error I get. Instead of Customer ,I have user, but the other code is the same.
Where have i made the mistake.

TypeError: User.viewAll is not a function at exports.viewAll

(E:\touchtraks\api\v1\controller\user.controller.js:4:7) at Layer.handle [as
handle_request] (E:\touchtraks\api\node_modules\express\lib\router\layer.js:95:5) at
next (E:\touchtraks\api\node_modules\express\lib\router\route.js:137:13) at

Route.dispatch (E:\touchtraks\api\node_modules\express\lib\router\route.js:112:3) at
Layer.handle [as handle_request]

(E:\touchtraks\api\node_modules\express\lib\router\layer.js:95:5) at
E:\touchtraks\api\node_modules\express\lib\router\index.js:281:22 at

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Function.process_params

(E:\touchtraks\api\node_modules\express\lib\router\index.js:335:12) at next
(E:\touchtraks\api\node_modules\express\lib\router\index.js:275:10) at
urlencodedParser (E:\touchtraks\api\node_modules\body-
parser\lib\types\urlencoded.js:82:7) at Layer.handle [as handle_request]
(E:\touchtraks\api\node_modules\express\lib\router\layer.js:95:5)

REPLY

bezcoder

April 29, 2020 at 11:42 pm (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-1798>)

Hi, please show your code here 😊

REPLY

Nixon Augustine

April 30, 2020 at 5:01 am (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-1805>)

Hi, Really Appreciate you answering my previous question. I have a question, which might sound too basic.

It would be great if you could answer it .

Can you explain the flow of control from the time an api request hits the server.

From Server.js -> where does the control go and what does it check.

Thanks in advance.

REPLY


bezcoder

April 30, 2020 at 12:01 pm (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-1837>)

You can follow this flow:

server.js -> routes -> controller -> model.

REPLY

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Nixon Augustine

April 30, 2020 at 5:35 am (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-1807>)

I got the error fixed.

[REPLY](#)**Yunus Emre**

August 22, 2020 at 10:56 pm (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-4434>)

Hey Nixon. Just a quick reminder. When you fix the problem, always share the steps that you have take in. You never know how it might help to someone in future.

For anyone who is having the same problem, just add "module.exports.Course = Course;" at the end of course.model.js file. We need to export objects, classes to be able reference and use in in other files.

[REPLY](#)**Yunus Emre**

August 22, 2020 at 11:03 pm (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-4435>)

Sorry just add "module.exports = Course"

ahmed hlaimi

May 2, 2020 at 12:01 am (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-1862>)

hello awsome tuto bu u have one mistake in require("./app/routes/customer.routes.js") (app);

u should delete app from path like this :

require("./routes/customer.routes.js")(app); at server.js

[REPLY](#)

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May 2, 2020 at 12:22 am (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-1864>)

Hi, because we put *server.js* in the root folder, so the directory should be `"/app/routes/customer.routes.js"`. 😊

[REPLY](#)**sarah**

November 2, 2020 at 7:14 pm (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-5268>)

Hi, i removed /app and it worked for me

[REPLY](#)**Karl**

May 3, 2020 at 2:10 pm (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-1896>)

Hi bezkoder,

thks for this tutorial. I m also new to react and try to use this tutorial to train myself but I cant move forward. Can you tell me where and how I should run the mysql query to create the table CUSTOMER?

"So run the SQL script below to create customers table:"

I've done it in the root directory but got some errors

Thks in advance

[REPLY](#)**bezkoder**

May 4, 2020 at 2:14 am (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-1904>)

Hi, you can use MySQL Workbench (<https://www.mysql.com/products/workbench/>) or MySQL Client (<https://dev.mysql.com/doc/refman/5.7/en/mysql-commands.html>) to run MySQL command.

[REPLY](#)

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Harsh

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May 6, 2020 at 6:18 pm (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-2035>)

Accept

Hey there is a mistake in the code .

// Instead of this

```
Customer.findById = (customerId, result) => {  
  sql.query(`SELECT * FROM customers WHERE id = ${customerId}`, (err, res) => {  
    .....}  
  })  
}
```

// Please correct it to

```
sql.query(`SELECT * FROM customers WHERE id = "${customerId}"`, (err, res) => {  
  .....  
})
```

// add the double quotes in where clause

Thanks for the tutorial though

Cheers!

REPLY

Bella

May 11, 2020 at 6:19 am (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-2221>)

Wow, this is really nice. This is my first workable project with js and it's so impressive. The next step, how can I link it with my UI? Do you have any nice lesson to suggest? Cheers

REPLY

Sam

May 14, 2020 at 6:19 pm (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-2438>)

<https://bezkode.com/react-node-express-mysql/> (<https://bezkode.com/react-node-express-mysql/>)

Here you go

REPLY

kkwaxy

May 17, 2020 at 7:28 pm (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-2537>)

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Thanks a lot. It's been very helpful for me. I'm newer on nodejs

Accept

REPLY

david arias

May 19, 2020 at 5:06 am (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-2613>)

Buenas noches Koder:

Me podrías apoyar con este error... Ya probé varias opciones e investigué otras opciones y nada.

O si puedes dar otra opción. Por favor.

```
require("./app/routes/customer.routes")(app)
```

^

TypeError: require(...) is not a function

at Object. (C:\Cursos\KODER\node-express-mysql\server.js:19:40)

at Module._compile (internal/modules/cjs/loader.js:1185:30)

at Object.Module._extensions..js (internal/modules/cjs/loader.js:1205:10)

at Module.load (internal/modules/cjs/loader.js:1034:32)

at Function.Module._load (internal/modules/cjs/loader.js:923:14)

at Function.executeUserEntryPoint [as runMain] (internal/modules/run_main.js:71:12)

at internal/main/run_main_module.js:17:47

PS C:\Cursos\KODER\node-express-mysql>

REPLY

bezkoder

May 19, 2020 at 9:46 am (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-2625>)

Hi, please show me your code in `./app/routes/customer.routes`.

REPLY

Msukma

May 20, 2020 at 5:27 am (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-2672>)

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I have issue, on showing html when using view template engine (ejs), on this scenario
1.parsing url with params or more than 1 level url name, but but work well when showing
1 level url

```
-----  
app.get('/home:params',function(req,res){  
  res.render('home')  
})  
or..
```

```
app.get('/home/sub',function(req,res){  
  res.render('home')  
})
```

thanks,

REPLY

hia

May 23, 2020 at 11:45 pm (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-2838>)

I will recommend to all my friends and colleagues. Thank you very much for this tutorial!

REPLY

Michele Bridi

June 5, 2020 at 8:01 am (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-3111>)


hello, sorry for the ignorance but I would like to know how to create the db, if I have not misunderstood you explain how to connect and do the rest but I do not know how to access / create the db thanks

REPLY

Percy

June 5, 2020 at 10:37 am (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-3113>)

Im getting this error "No database selected"

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```

error: Error: ER_NO_DB_ERROR: No database selected
at Query.Sequence._packetToError
(C:\Users\master\BackEnd\DeclareApp\code\node_modules\mysql\lib\protocol\sequence
s\Sequence.js:47:14)
at Query.ErrorPacket
(C:\Users\master\BackEnd\DeclareApp\code\node_modules\mysql\lib\protocol\sequence
s\Query.js:79:18)
at Protocol._parsePacket
(C:\Users\master\BackEnd\DeclareApp\code\node_modules\mysql\lib\protocol\Protocol.j
s:291:23)
at Parser._parsePacket
(C:\Users\master\BackEnd\DeclareApp\code\node_modules\mysql\lib\protocol\Parser.js:
433:10)
at Parser.write
(C:\Users\master\BackEnd\DeclareApp\code\node_modules\mysql\lib\protocol\Parser.js:
43:10)
at Protocol.write
(C:\Users\master\BackEnd\DeclareApp\code\node_modules\mysql\lib\protocol\Protocol.j
s:38:16)
at Socket.
(C:\Users\master\BackEnd\DeclareApp\code\node_modules\mysql\lib\Connection.js:88:2
8)
at Socket.
(C:\Users\master\BackEnd\DeclareApp\code\node_modules\mysql\lib\Connection.js:526:
10)
at Socket.emit (events.js:310:20)
at addChunk (_stream_readable.js:286:12)
-----
at Protocol._enqueue
(C:\Users\master\BackEnd\DeclareApp\code\node_modules\mysql\lib\protocol\Protocol.j
s:144:48)
at Connection.query
(C:\Users\master\BackEnd\DeclareApp\code\node_modules\mysql\lib\Connection.js:198:
25)
at Function.User.getAll
(C:\Users\master\BackEnd\DeclareApp\code\app\models\user.model.js:47:7)
at exports.findAll
(C:\Users\master\BackEnd\DeclareApp\code\app\controllers\user.controller.js:34:10)
at Layer.handle [as handle_request]
(C:\Users\master\BackEnd\DeclareApp\code\node_modules\express\lib\router\layer.js:9
5:5)
at next

```

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```
(C:\Users\master\BackEnd\DeclareApp\code\node_modules\express\lib\router\route.js:1
37:13)
at Route.dispatch
(C:\Users\master\BackEnd\DeclareApp\code\node_modules\express\lib\router\route.js:1
12:3)
at Layer.handle [as handle_request]
(C:\Users\master\BackEnd\DeclareApp\code\node_modules\express\lib\router\layer.js:9
5:5)
at
C:\Users\master\BackEnd\DeclareApp\code\node_modules\express\lib\router\index.js:2
81:22
at Function.process_params
(C:\Users\master\BackEnd\DeclareApp\code\node_modules\express\lib\router\index.js:3
35:12) {
  code: 'ER_NO_DB_ERROR',
  errno: 1046,
  sqlMessage: 'No database selected',
  sqlState: '3D000',
  index: 0,
  sql: 'SELECT * FROM user'
}
```

REPLY

bezcoder

June 7, 2020 at 1:20 am (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-3132>)

Hi, please check the database configuration in the code (*db.config.js*). It should match your PC MySQL database configuration.

REPLY

Edward

June 12, 2020 at 9:35 am (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-3243>)

Hi, Great Tutorial.

When testing the APIs with postman, I try and create a new customer. It successfully creates the customer and console logs the created customer but then throws the error:

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ReferenceError: result is not defined
at Query. (****/customer.model.js:19:9)

This is the code im using to create the customer in the database:

```
Customer.create = (newCustomer, results) => {  
  sql.query("INSERT INTO customers SET ?", newCustomer, (err, res) => {  
    if (err) {  
      console.log("error: ", err);  
      result(err, null);  
      return;  
    }  
  
    console.log("created customer: ", { id: res.insertId, ...newCustom  
    result(null, { id: res.insertId, ...newCustomer });  
  });  
}
```



Any help would be greatly appreciated

REPLY

324234

June 27, 2020 at 5:29 pm (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-3488>)

hmmm..may be it should be result, not results here

```
Customer.create = (newCustomer, result)
```

REPLY

NewBie

July 18, 2020 at 5:50 pm (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-3817>)

you have `results` and `result`.

REPLY



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Naveen Gupta
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June 13, 2020 at 1:24 am (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-3254>)

Accept

Thanks, explained so well.

REPLY

yos

June 23, 2020 at 9:43 pm (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-3423>)

hello, i need to know, if i want to get some customers, not all.

thanks a lot

REPLY

bezkoder

June 24, 2020 at 12:35 am (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-3425>)

Hi, if you want to make pagination, please read this tutorial:

Server side Pagination in Node.js with Sequelize & MySQL (<https://bezkoder.com/node-js-sequelize-pagination-mysql/>)

REPLY

yosmar gonzalez

July 11, 2020 at 10:34 pm (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-3701>)

Hello bezkoder, i am very new in api rest. i need get some customer for name and not for id.

this is for id in typescript



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```

public async getOne (req:Request,res:Response): Promise{
    const { id } = req.params;
    const habitante = await pool.query('SELECT * FROM habitantes WH
    if (habitante.length>0)
    {
        return res.json(habitante[0]);
    }
    console.log(habitante);
    res.status(404).json({ text:'El habitante '+ req.params.id + '
    }

```

and the routes is

```

this.router.get('/:id', HabitantesController.getOne);

```

this works perfectly

i need something like that

```

public async getSome (req:Request,res:Response): Promise{
    const { termino } = req.params;
    const habitantes = await pool.query('SELECT * FROM habitantes W
    if (habitantes.length>0)
    {
        return res.json(habitantes);
    }
    console.log(habitantes);
    res.status(404).json({ text:'No existen habitantes que coincidan
    }

```

habitantesroutes.ts

```

this.router.get('/:termino', HabitantesController.getSome);

```

this doesn't work but always the Api consider the parameter 'termino' as if it were the id

help me please.



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REPLY

mamta

June 27, 2020 at 1:49 pm (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-3482>)

Hello sir, here is my code of server.js

```
const express = require("express");
const bodyParser = require("body-parser");

const app = express();

// parse requests of content-type: application/json
app.use(bodyParser.json());

// parse requests of content-type: application/x-www-form-urlencoded
app.use(bodyParser.urlencoded({ extended: true }));

// simple route
app.get("/", (req, res) => {
  res.json({ message: "Welcome to bezkoder application." });
});

require("./app/routes/customer.routes.js")(app);

// set port, listen for requests
app.listen(3000, () => {
  console.log("Server is running on port 3000.");
});

created customer: { id: 3, email: undefined, name: undefined }
where is the problem
```

REPLY

Vanille

March 16, 2021 at 8:45 am (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-7626>)

Hey, i've got the same problem, did you find a solution?

REPLY



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August 17, 2021 at 12:44 pm (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-10942>)

Double check that you're sending the request with the proper JSON attached, i.e:

```
{
  "email": "test@email.com",
  "name": "Bob".
  "active": true
}
```

REPLY

maky

June 28, 2020 at 2:38 am (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-3495>)

Thank you very much for this tutorial!

REPLY

nitu

July 11, 2020 at 5:25 pm (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-3696>)

Server is running on port 3000.

D:\nodejs-express-mysql\node_modules\mysql\lib\protocol\Parser.js:437

throw err; // Rethrow non-MySQL errors

^

Error: ER_NOT_SUPPORTED_AUTH_MODE: Client does not support authentication protocol requested by server; consider upgrading MySQL client

at Handshake.Sequence._packetToError (D:\nodejs-express-mysql\node_modules\mysql\lib\protocol\sequences\Sequence.js:47:14)

at Handshake.ErrorPacket (D:\nodejs-express-mysql\node_modules\mysql\lib\protocol\sequences\Handshake.js:123:18)

at Protocol._parsePacket (D:\nodejs-express-mysql\node_modules\mysql\lib\protocol\Protocol.js:291:23)

at Parser._parsePacket (D:\nodejs-express-mysql\node_modules\mysql\lib\protocol\Parser.js:433:10)

at Parser.write (D:\nodejs-express-mysql\node_modules\mysql\lib\protocol\Parser.js:43:10)

at Protocol.write (D:\nodejs-express-mysql\node_modules\mysql\lib\protocol\Protocol.js:38:16)

at Socket.< (D:\nodejs-express-mysql\node_modules\mysql\lib\Connection.js:88:28)

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Account

```

at Socket. (D:\nodejs-express-mysql\node_modules\mysql\lib\Connection.js:526:10)
at Socket.emit (events.js:198:13)
at addChunk (_stream_readable.js:288:12)
-----
at Protocol._enqueue (D:\nodejs-express-
mysql\node_modules\mysql\lib\protocol\Protocol.js:144:48)
at Protocol.handshake (D:\nodejs-express-
mysql\node_modules\mysql\lib\protocol\Protocol.js:51:23)
at Connection.connect (D:\nodejs-express-
mysql\node_modules\mysql\lib\Connection.js:116:18)
at Object. (D:\nodejs-express-mysql\app\models\db.js:13:12)
at Module._compile (internal/modules/cjs/loader.js:778:30)
at Object.Module._extensions..js (internal/modules/cjs/loader.js:789:10)
at Module.load (internal/modules/cjs/loader.js:653:32)
at tryModuleLoad (internal/modules/cjs/loader.js:593:12)
at Function.Module._load (internal/modules/cjs/loader.js:585:3)
at Module.require (internal/modules/cjs/loader.js:692:17)

i got this error...can anyone help me?

```

REPLY

desperate_student

August 20, 2020 at 9:18 pm (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-4409>)

I found this solution and it worked for me :

<https://stackoverflow.com/questions/50093144/mysql-8-0-client-does-not-support-authentication-protocol-requested-by-server>


(<https://stackoverflow.com/questions/50093144/mysql-8-0-client-does-not-support-authentication-protocol-requested-by-server>)

REPLY

Philip

December 10, 2020 at 3:42 pm (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-5717>)

go to MySQL Installer > Reconfigure MySQL Server > Authentication Method and select
 "Use Legacy Authentication Method (Retain MySQL 5.x Compatibility)"

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REPLY

Vincent F

July 13, 2020 at 1:01 pm (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-3725>)

Great tutorial and really appreciated. CRUD applications are real-world problems many tutorials can seem to overlook. This was perfect.

REPLY

Harry Karani

July 17, 2020 at 7:19 am (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-3786>)

Nice tutorial, especially for anyone doing an intro to REST APIs in NodeJS. Simple and straight to the point. Well done

REPLY

Shivani

July 25, 2020 at 11:04 am (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-3940>)

I have the following error. It will be a great help if you can it as soon as possible.

```
C:\Program Files\nodejs\nodejs-express-mysql>node server.js
```

```
Server is running on port 3000.
```

```
C:\Program Files\nodejs\nodejs-express-
mysql\app\node_modules\mysql\lib\protocol\Parser.js:437
throw err; // Rethrow non-MySQL errors
^
```

```
Error: ER_ACCESS_DENIED_ERROR: Access denied for user 'root'@'localhost' (using
password: YES)
```

```
at Handshake.Sequence._packetToError (C:\Program Files\nodejs\nodejs-express-
mysql\app\node_modules\mysql\lib\protocol\sequences\Sequence.js:47:14)
```

```
at Handshake.ErrorPacket (C:\Program Files\nodejs\nodejs-express-
mysql\app\node_modules\mysql\lib\protocol\sequences\Handshake.js:123:18)
```

```
at Protocol._parsePacket (C:\Program Files\nodejs\nodejs-express-
mysql\app\node_modules\mysql\lib\protocol\Protocol.js:291:23)
```

```
at Parser._parsePacket (C:\Program Files\nodejs\nodejs-express-
mysql\app\node_modules\mysql\lib\protocol\Parser.js:433:10)
```

```
at Parser.write (C:\Program Files\nodejs\nodejs-express-
mysql\app\node_modules\mysql\lib\protocol\Parser.js:43:10)
```

```
at Protocol.write (C:\Program Files\nodejs\nodejs-express-
```

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```

mysql\app\node_modules\mysql\lib\protocol\Protocol.js:38:16)
at Socket. (C:\Program Files\nodejs\nodejs-express-
mysql\app\node_modules\mysql\lib\Connection.js:88:28)
at Socket. (C:\Program Files\nodejs\nodejs-express-
mysql\app\node_modules\mysql\lib\Connection.js:526:10)
at Socket.emit (events.js:315:20)
at addChunk (_stream_readable.js:295:12)
-----
at Protocol._enqueue (C:\Program Files\nodejs\nodejs-express-
mysql\app\node_modules\mysql\lib\protocol\Protocol.js:144:48)
at Protocol.handshake (C:\Program Files\nodejs\nodejs-express-
mysql\app\node_modules\mysql\lib\protocol\Protocol.js:51:23)
at Connection.connect (C:\Program Files\nodejs\nodejs-express-
mysql\app\node_modules\mysql\lib\Connection.js:116:18)
at Object. (C:\Program Files\nodejs\nodejs-express-mysql\app\models\db.js:13:12)
at Module._compile (internal/modules/cjs/loader.js:1138:30)
at Object.Module._extensions..js (internal/modules/cjs/loader.js:1158:10)
at Module.load (internal/modules/cjs/loader.js:986:32)
at Function.Module._load (internal/modules/cjs/loader.js:879:14)
at Module.require (internal/modules/cjs/loader.js:1026:19)
at require (internal/modules/cjs/helpers.js:72:18) {
  code: 'ER_ACCESS_DENIED_ERROR',
  errno: 1045,
  sqlMessage: "Access denied for user 'root'@'localhost' (using password: YES)",
  sqlState: '28000',
  fatal: true
}

```

REPLY

bezcoder

July 25, 2020 at 3:15 pm (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-3943>)

Hi, you should create database with correct host, username, password, port. Then modify the configuration in the source code.

REPLY



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Privacy & Policy (<https://bezcoder.com/privacy-policy/>)
 Shivani

Accept

July 27, 2020 at 4:43 am (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-3992>)

also one query customers is one table here but in my case i have to join 3 tables and then put that data in kendro grid then how can i put that query in this code. please help.
how can i do it.

REPLY

Shivani

July 27, 2020 at 4:53 am (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-3993>)

And there are three join queries for each section on the front end. It will be a great help if you could provide entire solution as you have join on your website. Thanks in Advance.

REPLY

awanti

July 25, 2020 at 5:03 pm (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-3949>)

hello.....in my console it is just showing Server running on port 3000, but it is not showing Successfully connected database....and while sending requests on postman it shows that request cannot be sendplease give reply..please suggest something to work properly

REPLY

Shivani

July 30, 2020 at 2:53 am (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-4070>)

how to solve the following error . please help it is urgent.
events.js:292
throw er; // Unhandled 'error' event
^

Error: listen EADDRINUSE: address already in use :::3000

at Server.setupListenHandle [as listen2] (net.js:1313:16)

at listenInCluster (net.js:1361:12)

at Server.listen (net.js:1447:7)

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```
at Function.listen (C:\Program Files\nodejs\nodejs-express-  
mysql\node_modules\express\lib\application.js:618:24)  
at Object. (C:\Program Files\nodejs\nodejs-express-mysql\server.js:19:5)  
at Module._compile (internal/modules/cjs/loader.js:1138:30)  
at Object.Module._extensions..js (internal/modules/cjs/loader.js:1158:10)  
at Module.load (internal/modules/cjs/loader.js:986:32)  
at Function.Module._load (internal/modules/cjs/loader.js:879:14)  
at Function.executeUserEntryPoint [as runMain] (internal/modules/run_main.js:71:12)  
Emitted 'error' event on Server instance at:  
at emitErrorNT (net.js:1340:8)  
at processTicksAndRejections (internal/process/task_queues.js:84:21) {  
  code: 'EADDRINUSE',  
  errno: 'EADDRINUSE',  
  syscall: 'listen',  
  address: '::',  
  port: 3000  
}
```

REPLY

bezkoderJuly 30, 2020 at 2:55 am (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-4071>)

Hi, you need to stop the service which is using port 3000, or change the app server port.

REPLY

ShivaniJuly 30, 2020 at 11:41 am (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-4084>)

okay thank you so much

REPLY

MapiAugust 5, 2020 at 3:56 pm (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-4209>)

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Hi,
thank you for your clear and simple tutorial. Im new to javascript and node.js.
Can you explain why you didn't work with the ES6 syntax?
e.g. customer:

```
class Customer{
  constructor(name, email, active) {
    this.name= name;
    this.email= email;
    this.active=active;
  }
}
```

I know object oriented languages like Java – is your way the 'recommended' way in javascript? Or should I work with this ES6 syntax for better design?

Thank you

REPLY

Hunor

August 12, 2020 at 7:06 pm (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-4289>)

I was wondering why the routing was implemented via passing the app object into the exported routing function instead of using the Router object that express provides.

Is it because it's one less line of code per route?

REPLY

Orholt

August 14, 2020 at 10:43 am (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-4309>)

Hi, I had problem with removing item from my MySQL DB, can someone help me?

I posted the issue on StackOverflow but only answer don't seems to work:

<https://stackoverflow.com/questions/63400833/node-js-api-cant-delete-from-database>

(<https://stackoverflow.com/questions/63400833/node-js-api-cant-delete-from-database>)

REPLY



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Accept

Cristian

August 16, 2020 at 1:35 am (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-4333>)

Hello,

excellent article. It was very helpful to me. I have a question, because in the models, the errors are returned where the data should go. for example:

```
Customer.getAll = result => {  
  sql.query ("SELECT * FROM customers", (err, res) => {  
    if (err) {  
      console.log ("error:", err);  
      result (null, err);  
      return;  
    }  
  
    console.log ("customers:", res);  
    result (null, res);  
  });  
};
```

Instead of:

```
if (err) {  
  result (err, null);  
  return;  
}
```

Thanks for the article!

REPLY

Abel Heredia Bravo

August 16, 2020 at 7:54 am (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-4338>)

Excelent !!!!

REPLY



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Dragon
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August 21, 2020 at 2:34 am (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-4413>)

Accept

With this controller-model solution, is it possible to handle async and wait process?

REPLY

bezcoder

May 24, 2021 at 10:45 am (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-8690>)

Hi, yes you can 😊

It looks like:

```
exports.findAll = async (req, res, next) => {  
  const { ok, result, error } = await Customer.getAll();  
  if (!ok) {  
    next(error)  
  }  
  return res.send(result);  
};
```

REPLY

Khashaa

August 27, 2020 at 7:11 am (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-4486>)

It was freakin helpful for me!

REPLY

kodingspot

September 8, 2020 at 5:06 pm (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-4647>)

is beautiful if you using new Promise() on the model....

REPLY



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September 11, 2020 at 3:26 pm (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-4686>)

Accept

This tutorial is incomplete. After you write:

"npm install express mysql body-parser -save"

You never generate any files. Therefore all the controller-files are missing. Other people have had problems with this in above comments. The app-folder is not present for example.

If you are going to make a step by step tutorial, please make it step by step and don't miss out on os-commands.

[REPLY](#)

kirad

September 15, 2020 at 1:53 pm (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-4726>)

Great

[REPLY](#)

jahangir

October 7, 2020 at 11:41 am (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-4944>)

how to generate package-lock.json file ?

[REPLY](#)

bezkoder

October 7, 2020 at 1:40 pm (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-4945>)

Hi, please run the command: `npm install`

[REPLY](#)

Bisht

October 8, 2020 at 6:48 am (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-4956>)

Hello,

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I am getting this error can you help.

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Accept



```
TypeError: sql.query is not a function
at Function.Customer.create (/home/bisht/nodejs-express-
mysql/app/models/customer.model.js:11:7)
at exports.create (/home/bisht/nodejs-express-
mysql/app/controllers/customer.controller.js:20:14)
at Layer.handle [as handle_request] (/home/bisht/nodejs-express-
mysql/node_modules/express/lib/router/layer.js:95:5)
at next (/home/bisht/nodejs-express-
mysql/node_modules/express/lib/router/route.js:137:13)
at Route.dispatch (/home/bisht/nodejs-express-
mysql/node_modules/express/lib/router/route.js:112:3)
at Layer.handle [as handle_request] (/home/bisht/nodejs-express-
mysql/node_modules/express/lib/router/layer.js:95:5)
at /home/bisht/nodejs-express-mysql/node_modules/express/lib/router/index.js:281:22
at Function.process_params (/home/bisht/nodejs-express-
mysql/node_modules/express/lib/router/index.js:335:12)
at next (/home/bisht/nodejs-express-
mysql/node_modules/express/lib/router/index.js:275:10)
at urlencodedParser (/home/bisht/nodejs-express-mysql/node_modules/body-
parser/lib/types/urlencoded.js:82:7)
TypeError: sql.query is not a function
at Function.Customer.getAll (/home/bisht/nodejs-express-
mysql/app/models/customer.model.js:43:7)
at exports.findAll (/home/bisht/nodejs-express-
mysql/app/controllers/customer.controller.js:32:14)
at Layer.handle [as handle_request] (/home/bisht/nodejs-express-
mysql/node_modules/express/lib/router/layer.js:95:5)
at next (/home/bisht/nodejs-express-
mysql/node_modules/express/lib/router/route.js:137:13)
at Route.dispatch (/home/bisht/nodejs-express-
mysql/node_modules/express/lib/router/route.js:112:3)
at Layer.handle [as handle_request] (/home/bisht/nodejs-express-
mysql/node_modules/express/lib/router/layer.js:95:5)
at /home/bisht/nodejs-express-mysql/node_modules/express/lib/router/index.js:281:22
at Function.process_params (/home/bisht/nodejs-express-
mysql/node_modules/express/lib/router/index.js:335:12)
at next (/home/bisht/nodejs-express-
mysql/node_modules/express/lib/router/index.js:275:10)
at urlencodedParser (/home/bisht/nodejs-express-mysql/node_modules/body-
parser/lib/types/urlencoded.js:82:7)
```

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REPLY

Ghanshyam Sharma

November 2, 2020 at 8:17 am (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-5264>)

Hello,

For this you need to add sql module `*npm install mysql*` and after include `*var mysql = require('mysql');*`
in your `server.js` or `index.js`

Thanks

REPLY

Aviroop Sanyal

November 12, 2020 at 6:07 am (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-5375>)

Thanks for your post. It was really helpful. Please help me with customer login with your rest api format

REPLY

bezkoder

November 12, 2020 at 8:20 am (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-5376>)

Hi, you can find the instruction at:

Node.js Express: JWT example | Token Based Authentication & Authorization
(<https://bezkoder.com/node-js-jwt-authentication-mysql/>)

REPLY

Manasa

November 19, 2020 at 6:46 am (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-5461>)

Thank you. Helped me a lot as a beginner.

REPLY



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Taufik Muharrom

December 11, 2020 at 7:18 am (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-5724>)

are "insertId" and "affectedRows" a method from sql ? i am still confused , where did the method come from.

[REPLY](#)**bezkoder**

December 11, 2020 at 2:13 pm (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-5731>)

Hi, they came from response data of MySQL query 😊

[REPLY](#)**Ajay**

December 28, 2020 at 6:05 am (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-5945>)

thank you

[REPLY](#)**Shubham Verma**

January 4, 2021 at 2:02 pm (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-6072>)

Thank You so much... (Very neat and precise explanation)

[REPLY](#)**mugesh**

January 30, 2021 at 7:48 pm (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-6694>)

postman error bro

```
{
```

```
  "message": "ER_BAD_NULL_ERROR: Column 'content' cannot be null"
```

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```
}
```

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error status: 500 internet server error



REPLY

bezkodeer

May 24, 2021 at 10:47 am (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-8691>)

Hi, kindly make sure that you have `Content-Type: application/json` in the HTTP request header 😊

REPLY

Raj

February 16, 2021 at 6:32 am (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-7056>)

works like a charm, well explained and thanks for sharingkeep up the good work and hope to see of more tutorials using react + nodejs, angular + nodejs with real-world examples and with authentication + authorization

REPLY

Minerva

March 9, 2021 at 3:36 am (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-7499>)

Nice tutorial, thanks.

Just FYI, small bug/typo in model section:

Should be `result(err, null)` instead of `result(null, err)`

REPLY

loeten

August 18, 2021 at 8:31 pm (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-10991>)

This is really a great tutorial! But indeed, only with

`result(err, null);`

I got a correct (wanted) error response when trying to remove all customers: I did set a constraint in the database, where the customer id is a foreign key in another table with valid data. So it is not possible in the DB to delete the (referenced) customer only. But

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the API reports "all customers deleted successfully" 😊 until I changed this line as you suggested.

[REPLY](#)

aaa

April 3, 2021 at 11:10 am (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-7877>)

hey hope you having a great day where should we implement the functions please ?

[REPLY](#)

Ashik Ali Shanto

April 9, 2021 at 12:28 pm (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-8020>)

`{"message": "ER_BAD_NULL_ERROR: Column 'email' cannot be null"}`
while post using postman

[REPLY](#)

Gwen

April 10, 2021 at 5:10 pm (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-8034>)

Thank you very much. It's one of the most clear tutorial on this subject I ever found.
So would you have an advice on an article clearly explaining how to add a security layer on this, like with token

TY

[REPLY](#)

Vignesh

April 18, 2021 at 3:41 am (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-8151>)

I saw your sequelize tutorial very nice, I want to do the same in this example, I mean

joining multiple table, how to achieve the association concept here, I know I can use sequelize but I want understand more in the boilerplate example

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[REPLY](#)

Vignesh

April 18, 2021 at 4:05 am (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-8153>)

How to achieve multiple table join in this example, I know we can use sequelize but I want to understand more in this example

[REPLY](#)**Reece**

April 30, 2021 at 12:52 am (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-8323>)

Great stuff.

Best tutorial I've found on the topic.

[REPLY](#)**shaikh**

May 6, 2021 at 12:25 pm (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-8408>)

Very helpful!

Thank you so much man!

[REPLY](#)**vineet**

June 10, 2021 at 12:54 pm (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-9003>)

when i am accesing this url <http://localhost:8000/customers>
(<http://localhost:8000/customers>) i am getting this message –
Cannot GET /customers

[REPLY](#)

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June 10, 2021 at 1:57 pm (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-9004>)

The problem that i posted few minute ago "can not get / customers" is resolved but i am facing other problem when i request URL in postman only sending request is coming no response is return so please help me to resolve this issue

REPLY

Toyyib

June 24, 2021 at 1:22 am (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-9265>)

```
require("../node_mysql/routes/customer.routes.js")(app)
```

What does this line do?

REPLY

Raj Rajput

July 15, 2021 at 3:44 am (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-9607>)

it's a very helpful article.

I request you please create another article for user registration and login with express validator & Token in express with MySQL.

Thanks

REPLY

bezkoder

July 16, 2021 at 1:49 am (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-9630>)

Hi, thanks for your suggestion.

We have the tutorial at: Node.js Express: JWT example | Token Based Authentication & Authorization (<https://www.bezkoder.com/node-js-jwt-authentication-mysql/>)

REPLY

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July 23, 2021 at 11:07 pm (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-9923>)

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Thank you man .. Well explained

REPLY

MOHAMED ZAKRIA AL MOKDADJuly 24, 2021 at 1:27 pm (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-9963>)

merci bien

REPLY

bruno costaJuly 25, 2021 at 3:40 pm (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-10009>)

bodyparser is deprecated, use express.json and express.urlencoded instead

REPLY

Max DelgadoAugust 13, 2021 at 3:00 pm (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-10796>)


Greetings! I am getting the error:

```
{
  code: 'ER_NOT_SUPPORTED_AUTH_MODE',
  errno: 1251,
  sqlMessage: 'Client does not support authentication protocol requested by server;
consider upgrading MySQL client',
  sqlState: '08004',
  fatal: true
}
```

REPLY

Ankit BhadanaSeptember 29, 2021 at 11:28 am (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-12799>)

Amazing stuff I found it all really helpful

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REPLY

Shahrizal

September 29, 2021 at 2:43 pm (<https://www.bezkoder.com/node-js-rest-api-express-mysql/#comment-12810>)

Thanks a lot. It's helps me a lot to start with my node js express journey

REPLY

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