CRUD Nodejs y Mongodb Fazt Code

https://www.youtube.com/watch?v=3J925fRI UE

Resumo do vídeo feito por Roberto Pinheiro

Criando arquivo de dependências

```
npm init --yes

package.json

{
    "name": "crud-nodejs-mongodb",
    "version": "1.0.0",
    "description": "",
    "main": "index.js",
    "scripts": {
        "test": "echo \"Error: no test specified\" && exit 1"
    },
    "keywords": [],
    "author": "",
    "license": "ISC"
}
```

Instalando pacotes

npm install express mongoose ejs morgan

```
C:\laragon\www\crud-nodejs-mongodb>npm install express mongoose ejs morgan npm notice created a lockfile as package-lock.json. You should commit this file. npm WARN crud-nodejs-mongodb@1.0.0 No description npm WARN crud-nodejs-mongodb@1.0.0 No repository field.

+ ejs@2.6.2
+ morgan@1.9.1
+ mongoose@5.6.10
+ express@4.17.1
added 76 packages from 52 contributors and audited 175 packages in 69.283s found 0 vulnerabilities
```

npm install nodemon -D

```
C:\laragon\www\crud-nodejs-mongodbangm install nodemon -0

> nodemorgi.19.1 postinstall C:\laragon\www\crud-nodejs-mongodb\node_modules\nodemon

> node bin/postinstall || exit 0

npm || MUD_crud-nodejs-mongodbgi.0.0 No description
npm || MUD_crud-nodejs-mongodbgi.0.0 No repository field,
npm || MUD_crud-n
```

package.json

```
"name": "crud-nodejs-mongodb",
 "version": "1.0.0",
 "description": "",
 "main": "index.js",
 "scripts": {
  "test": "echo \"Error: no test specified\" && exit 1"
 },
 "keywords": [],
 "author": "",
 "license": "ISC",
 "dependencies": {
  "ejs": "^2.6.2",
  "express": "^4.17.1",
  "mongoose": "^5.6.10",
  "morgan": "^1.9.1"
 },
 "devDependencies": {
  "nodemon": "^1.19.1"
 }
}
```

Configurando o servidor

app.js

O erro especificado é porque ainda não foi definida nenhuma rota para a página principal.

package.json

```
"name": "crud-nodejs-mongodb",
 "version": "1.0.0",
 "description": "",
 "main": "index.js",
 "scripts": {
  "start": "node src/app.js",
  "dev": "nodemon src/app.js"
 },
 "keywords": [],
 "author": "",
 "license": "ISC",
 "dependencies": {
  "ejs": "^2.6.2",
  "express": "^4.17.1",
  "mongoose": "^5.6.10",
  "morgan": "^1.9.1"
 "devDependencies": {
  "nodemon": "^1.19.1"
 }
}
```

Em produção (production), no servidor de hospedagem será executado:

npm start

```
C:\laragon\www\crud-nodejs-mongodb>npm start

> crud-nodejs-mongodb@1.0.0 start C:\laragon\www\crud-nodejs-mongodb

> node src/app.js

server on port 3000
```

Em desenvolvimento (devlopment), no servidor local será executado:

npm run dev

```
C:\laragon\www\crud-nodejs-mongodb>npm run dev

> crud-nodejs-mongodb@1.0.0 dev C:\laragon\www\crud-nodejs-mongodb
> nodemon src/app.js

[nodemon] 1.19.1
[nodemon] to restart at any time, enter `rs`
[nodemon] watching: *.*
[nodemon] starting `node src/app.js`
server on port 3000
```

Configurando views

app.js

```
const path = require('path');
const express = require('express');
const app = express();

/* settings */

// configurando a porta do servidor
app.set('port', process.env.PORT || 3000);

// configurando o diretório de views
app.set('views', path.join(__dirname, 'views'));

// definindo o motor de templates
app.set('view engine', 'ejs');

/* starting the server */
app.listen(app.get('port'), () => {
    console.log(`server on port ${app.get('port')}');
});
```

Configurando Middlewares

```
app.js
const path = require('path');
const express = require('express');
const morgan = require('morgan');
const app = express();
/* settings */
// configurando a porta do servidor
app.set('port', process.env.PORT | | 3000);
// configurando o diretório de views
app.set('views', path.join(__dirname, 'views'));
// definindo o motor de templates
app.set('view engine', 'ejs');
/* middlewares */
app.use(morgan('dev'));
/* starting the server */
app.listen(app.get('port'), () => {
 console.log(`server on port ${app.get('port')}`);
});
```

```
Error × +

( ) localhost:3000

Cannot GET /
```

```
C:\laragon\www\crud-nodejs-mongodb>npm run dev

> crud-nodejs-mongodb@1.0.0 dev C:\laragon\www\crud-nodejs-mongodb
> nodemon src/app.js

[nodemon] 1.19.1
[nodemon] to restart at any time, enter `rs`
[nodemon] watching: *.*
[nodemon] starting `node src/app.js`
server on port 3000

GET / 404 8.192 ms - 139
```

Conectando com o banco de dados

Rodando o servidor do Mongo

- Criar a pasta c:\mongodb e copiar os arquivos do Mongo para dentro dela.
- Dentro da pasta mongodo criar a subpasta data e dentro dela criar a subpasta db.



- Inserir o caminho da pasta bin do MongoDB no path do Windows.

C:\mongodb\bin

Importante: É dentro desta pasta mongodb/data/db que serão salvos os arquivos criados pelo Mongo.

Abrindo o servidor do MongoDB no Windows 7 - 32 bits

Sempre que for trabalhar com o MongoDB é necessário abrir o seu servidor. Para isso, entre no seu terminal com o seguinte comando:

mongod --storageEngine=mmapv1 --dbpath c:\mongodb\data\db --port 27017

```
[main]
[main] 32-bit servers don't have journaling enabled by default. Please use --journal if you want durability.
                                                                               [main]
[main] Hotfix NB2731284 or later update is est installed, will zero-out data files
                                                                              [mitandlisten] Pospode Starting; pid-13388 port-25977 dipath-c-\u00f3cond data 1108

[initandlisten] Pospode Starting; pid-13388 port-25977 dipath-c-\u00f3cond data 1108

[initandlisten] targetMinOS: Mindows Vista/Mindows Server 2008

[initandlisten] db wersion v3-2-22

[initandlisten] allocator: tomalloc

[initandlisten] allocator: tomalloc

[initandlisten] modules: none
       -88-24T62;84;51,558-6386 I CONTROL
-88-24T62;84;51,558-6386 I CONTROL
       88-24162:04:51.550-0300 I CONTROL
-00-24102:04:51.550-0300 I CONTROL
                                                                              [initandlisten] build environment:

[Initandlisten] distarch: 1386

[initandlisten] target_arch: 1385

[initandlisten] options: { net: { port: ZZRI7 }, storage: { dbPath: "c:\mongodb\data\dh", engine: "mapv1" } }
       -88-24T62;84:51.558-6366 I CONTROL
-88-24T62:84:51.558-6366 I CONTROL
 019-08-24702:04:51.558-0300 I CONTROL
019-08-24702:04:51.551-0300 I CONTROL
                                                                               [initandlisten]
[initandlisten] ** WARWING: This 32-bit Mongol® binary is deprecated
[initandlisten]
2019-08-24102:04:51.667-0300 I CONTROL
2019-08-24102:04:51.667-0300 I CONTROL
2019-08-24102:04:51.668-0300 I CONTROL
2019-08-24102:04:51.668-0300 I CONTROL
                                                                              [initandlisten] ** MITE: This is a 32 bit MorgoON bloary.
[initandlisten] ** 32 bit builds are limited to less than 200 of data (or less with —journaling defaults to off for 32 bit and is currently off.
[initandlisten] ** See http://dochub.morgodh.org/core/32bit
[initandlisten]
  819-68-24702:04:51.690-0300 I CONTROL
819-08-24702:84:51.690-6368 I CONTROL
  H19-88-24T82:84:51.691-8388 I CONTROL
H19-88-24T82:84:51.692-8388 I CONTROL
                                                                              [initimolisten] [HestnameCanonicalizationWorker] Starting hostname canonicalization worker 
[initimolisten] Failed to initialize Performance Counters for FIOC: WindowsPdhError: PdhExpandCounterPathw fai 
encontrado no computador.' for counter '\Processor(_total)\W Idle Time' 
[initimolisten] Initializing full-time diagnostic data capture with directory 'c:/mongodb/data/db/diagnostic.d
       -88-24182:84:55.138-8388 W FTDC
019-08-24T02:04:55-130-0300 T FTDC
   19-88-24T82:84:55.162-8308 I NETWORK [initandlisten] waiting for connections on port 27817
```

Configurando as rotas e a conexão com o BD

```
app.js
const path = require('path');
const express = require('express');
const morgan = require('morgan');
const mongoose = require('mongoose');
const app = express();
/* connection to db */
mongoose.connect('mongodb://localhost/crud-mongo')
 .then(db => console.log('db connected'))
 .catch(err => console.log(err));
/* Importing routes */
const indexRoutes = require('./routes/index');
/* settings */
// configurando a porta do servidor
app.set('port', process.env.PORT || 3000);
// configurando o diretório de views
app.set('views', path.join(__dirname, 'views'));
// definindo o motor de templates
app.set('view engine', 'ejs');
/* middlewares */
app.use(morgan('dev'));
// para entender os dados que vem de um formulário
app.use(express.urlencoded({extended: false}));
/* routes */
app.use('/', indexRoutes);
/* starting the server */
app.listen(app.get('port'), () => {
 console.log(`server on port ${app.get('port')}`);
});
```

Não é necessário criar a BD porque se ela não existe será criada automaticamente com o nome dado. Nesse caso, o nome do database criado será crud-mongo.

```
[nodemon] restarting due to changes...
[nodemon] restarting due to changes...
[nodemon] starting 'code arc/app.js'
(node:21268) Despeciation/arming: current URL string parser is deprecated, and will be removed in a future version. To use the new parser, pass option
( useMosAMPlemser: true ) to MongoClient.connect.
sarver on port 3888
db connected
[]
```

Uma conexão agora está aberta:

```
2019-08-24T02:04:55.162-0300 I NETWORK [initandlisten] waiting for connections on port 27017
2019-08-24T02:11:40.187-0300 I NETWORK [initandlisten] connection accepted from 127.0.0.1:53029 #1 (1 connection now open)
```

Configurando Models

```
src/models/task.js
```

```
const mongoose = require('mongoose');
const Schema = mongoose.Schema;

const TaskSchema = Schema({
   title: String,
   description: String,
   status: {
     type: Boolean,
     default: false
   }
});

module.exports = mongoose.model('tasks', TaskSchema);
```

Configurando a rota principal

src/routes/index.js

```
const express = require('express');
const router = express.Router();

router.get('/', (req, res) => {
    res.send('Hello World!');
});

module.exports = router;

localhost:3000/
```

(i) localhost:3000

Hello World!

```
const express = require('express');
const router = express.Router();

router.get('/', (req, res) => {
    res.render('index');
});

module.exports = router;
```

```
<!DOCTYPE html>
<html>
 <head>
  <meta charset="utf-8">
  <title>CRUD Nodejs y MongoDb</title>
  <!-- BOOTSTRAP CDN -->
  <link rel="stylesheet"</pre>
href="https://stackpath.bootstrapcdn.com/bootstrap/4.1.0/css/bootstrap.min.css"
integrity="sha384-9gVQ4dYFwwWSjIDZnLEWnxCjeSWFphJiwGPXr1jddIhOegiu1FwO5qRGvFXOdJZ4"
crossorigin="anonymous">
 </head>
 <body>
  <nav class="navbar navbar-dark bg-dark mb-4">
   <a class="navbar-brand" href="#">CRUD Nodejs Y Mongodb</a>
  </nav>
  <div class="container">
    <h1>Hello World</h1>
  </div>
</body>
</html>
 CRUD Nodejs y MongoDb
          C 0
                                    i localhost:3000
```

Hello World

CRUD Nodejs Y Mongodb

```
<% include partials/_header %>
  <div class="container">
    <h1>Hello World</h1>
  </div>
<% include partials/_footer %>
src/views/partials/_header.js
<!DOCTYPE html>
<html>
 <head>
  <meta charset="utf-8">
  <title>CRUD Nodejs y MongoDb</title>
  <!-- BOOTSTRAP CDN -->
  <link rel="stylesheet"</pre>
href="https://stackpath.bootstrapcdn.com/bootstrap/4.1.0/css/bootstrap.min.css"
integrity="sha384-9gVQ4dYFwwWSjIDZnLEWnxCjeSWFphJiwGPXr1jddIhOegiu1FwO5qRGvFXOdJZ4"
crossorigin="anonymous">
 </head>
 <body>
  <nav class="navbar navbar-dark bg-dark mb-4">
   <a class="navbar-brand" href="#">CRUD Nodejs Y Mongodb</a>
  </nav>
src/views/partials/_footer.js
</body>
</html>
 CRUD Nodejs y MongoDb
     → C û
                                 i localhost:3000
  CRUD Nodejs Y Mongodb
```

Hello World

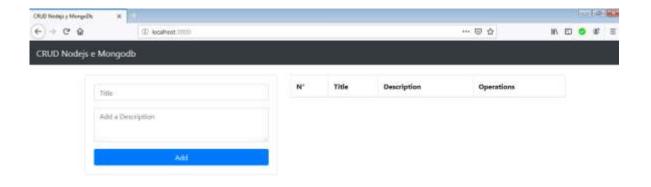
src/views/index.ejs

```
<% include partials/_header %>
  <div class="container">
    <div class="row">
      <!--FORM-->
      <div class="col-md-5">
       <div class="card">
        <div class="card-body">
         <form action="/add" method="post">
          <div class="form-group">
           <input class="form-control" type="text" name="title" placeholder="Title">
          </div>
          <div class="form-group">
           <textarea class="form-control" name="description" cols="80"
            placeholder="Add a Description"
            ></textarea>
          </div>
          <button class="btn btn-primary btn-block" type="submit">
           Add
          </button>
         </form>
        </div>
       </div>
      </div>
  </div>
```

<% include partials/_footer %>



```
<% include partials/_header %>
 <div class="container">
   <div class="row">
     <!--FORM-->
     <div class="col-md-5">
      <div class="card">
       <div class="card-body">
        <form action="/add" method="post">
         <div class="form-group">
         <input class="form-control" type="text" name="title" placeholder="Title">
         </div>
         <div class="form-group">
         <textarea class="form-control" name="description" cols="80"
          placeholder="Add a Description"
          ></textarea>
         </div>
         <button class="btn btn-primary btn-block" type="submit">
         Add
        </button>
        </form>
       </div>
      </div>
     </div>
     <!-- LIST -->
     <div class="col-md-7">
       <thead>
         N°
         Title
        Description
        Operations
        </thead>
       </div>
   </div>
 </div>
<% include partials/_footer %>
```



Rota para adicionar uma tarefa

```
const express = require('express');
const router = express.Router();

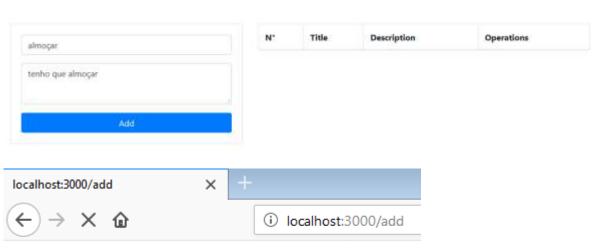
const Task = require('../models/task');

router.get('/', (req, res) => {
    res.render('index');
});

router.post('/add', (req, res, next) => {
    console.log(req.body);
    res.send('Received');
});

module.exports = router;
```

src/routes/index.js



Received

```
server on port 3000
db connected
GET / 304 102.574 ms - -
[Object: null prototype] { title: 'almoçar', description: 'tenho que almoçar' }
POST /add 200 161.267 ms - 8
```

```
const express = require('express');
const router = express.Router();

const Task = require('../models/task');

router.get('/', (req, res) => {
    res.render('index');
});

router.post('/add', (req, res, next) => {
    console.log(new Task(req.body));
    res.send('Received');
});

module.exports = router;
```

```
server on port 3000
db connected
GET / 304 32.615 ms - -
GET / 304 3.274 ms - -
{ status: false,
    _id: 5d61052802490f0b8cac07cb,
    title: 'almoçar',
    description: 'tenho que almoçar' }
POST /add 200 82.506 ms - 8
```

Criando e listando tarefas

```
src/routes/index.js
const express = require('express');
const router = express.Router();
const Task = require('../models/task');
router.get('/', async (req, res) => {
 const tasks = await Task.find();
 res.render('index', {
  tasks
 });
});
router.post('/add', async (req, res, next) => {
  const task = new Task(req.body);
  await task.save();
  res.redirect('/');
 });
module.exports = router;
     { status: false,
       _id: 5d61095371ba7654b863f22d,
```

title: 'correr',

_v: 0 },
{ status: false,

v: 0 }]

GET / 200 46.506 ms - 1953

description: 'tenho que correr às tardes',

_id: 5d610a3671ba7654b863f22e,
title: 'jogar',
description: 'tenho que jogar',

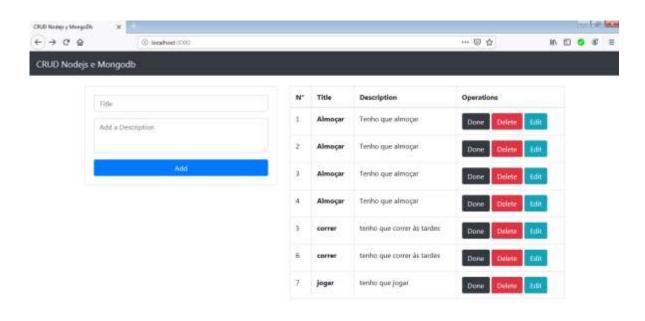
```
<% include partials/_header %>
 <%= tasks %>
 <div class="container">
   <div class="row">
     <!--FORM-->
     <div class="col-md-5">
      <div class="card">
       <div class="card-body">
        <form action="/add" method="post">
        <div class="form-group">
         <input class="form-control" type="text" name="title" placeholder="Title">
         </div>
         <div class="form-group">
         <textarea class="form-control" name="description" cols="80"
          placeholder="Add a Description"
          ></textarea>
         </div>
         <button class="btn btn-primary btn-block" type="submit">
        </button>
        </form>
       </div>
      </div>
     </div>
     <!-- LIST -->
     <div class="col-md-7">
       <thead>
         N°
        Title
         Description
         Operations
        </thead>
       </div>
     </div>
</div>
<% include partials/_footer %>
```



```
<% include partials/_header %>
 <div class="container">
   <div class="row">
     <!--FORM-->
     <div class="col-md-5">
      <div class="card">
       <div class="card-body">
        <form action="/add" method="post">
         <div class="form-group">
          <input class="form-control" type="text" name="title" placeholder="Title">
         </div>
         <div class="form-group">
          <textarea class="form-control" name="description" cols="80"
           placeholder="Add a Description"
           ></textarea>
         </div>
         <button class="btn btn-primary btn-block" type="submit">
          Add
         </button>
        </form>
       </div>
      </div>
     </div>
     <!-- LIST -->
     <div class="col-md-7">
       <thead>
         N°
         Title
         Description
         Operations
         </thead>
```

```
<% for(var i=0; i < tasks.length; i++) { %>
         <strong><%= tasks[i].title %></strong>
          <%= tasks[i].description %>
          <a
            class="<%= tasks[i].status ? 'btn btn-success' : 'btn btn-dark'%>"
            href="/turn/<%= tasks[i]._id %>">Done</a>
          <a href="/delete/<%= tasks[i]. id %>"
            class="btn btn-danger">
            Delete
          <a href="/edit/<%= tasks[i]._id %>" class="btn btn-info">
            Edit
          </a>
          <% } %>
       </div>
     </div>
</div>
```

<% include partials/_footer %>



Deletando tarefas

```
const express = require('express');
const router = express.Router();
const Task = require('../models/task');
router.get('/', async (req, res) => {
 const tasks = await Task.find();
 console.log(tasks);
 res.render('index', {
  tasks
 });
});
router.post('/add', async (req, res, next) => {
  const task = new Task(req.body);
  await task.save();
  res.redirect('/');
 });
 router.get('/delete/:id', async (req, res, next) => {
  let { id } = req.params;
  await Task.remove({_id: id});
  res.redirect('/');
 });
module.exports = router;
```



Marcando tarefas como realizadas ou não realizadas

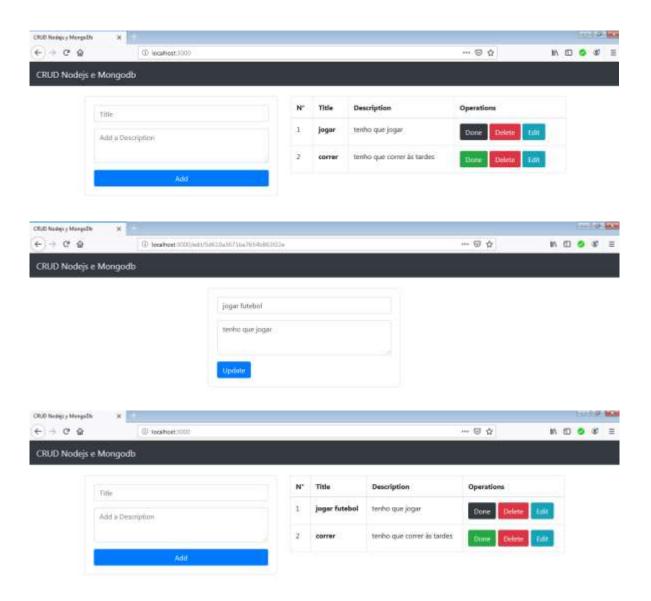
```
const express = require('express');
const router = express.Router();
const Task = require('../models/task');
router.get('/', async (req, res) => {
 const tasks = await Task.find();
 console.log(tasks);
 res.render('index', {
  tasks
 });
});
router.post('/add', async (req, res, next) => {
  const task = new Task(req.body);
  await task.save();
  res.redirect('/');
 });
 router.get('/turn/:id', async (req, res, next) => {
  let { id } = req.params;
  const task = await Task.findById(id);
  task.status = !task.status;
  await task.save();
  res.redirect('/');
 });
 router.get('/delete/:id', async (req, res, next) => {
  let { id } = req.params;
  await Task.remove({_id: id});
  res.redirect('/');
 });
module.exports = router;
```



Editando uma tarefa

```
const express = require('express');
const router = express.Router();
const Task = require('../models/task');
router.get('/', async (req, res) => {
 const tasks = await Task.find();
 console.log(tasks);
 res.render('index', {
  tasks
});
});
router.post('/add', async (req, res, next) => {
  const task = new Task(req.body);
  await task.save();
  res.redirect('/');
 });
 router.get('/turn/:id', async (req, res, next) => {
  let { id } = req.params;
  const task = await Task.findById(id);
  task.status = !task.status;
  await task.save();
  res.redirect('/');
 });
 router.get('/edit/:id', async (req, res, next) => {
  const task = await Task.findById(req.params.id);
  console.log(task)
  res.render('edit', { task });
 });
```

```
router.post('/edit/:id', async (req, res, next) => {
  const { id } = req.params;
  await Task.update({_id: id}, req.body);
  res.redirect('/');
 });
 router.get('/delete/:id', async (req, res, next) => {
  let { id } = req.params;
  await Task.remove({_id: id});
  res.redirect('/');
 });
module.exports = router;
src/views/edit.ejs
<% include partials/_header %>
<div class="container">
 <div class="row">
  <!--FORM-->
  <div class="col-md-5 offset-md-3">
   <div class="card">
    <div class="card-body">
     <form action="/edit/<%= task. id %>" method="post">
      <div class="form-group">
       <input class="form-control" type="text" name="title" placeholder="Title" value="<%=
task.title %>">
      </div>
      <div class="form-group">
       <textarea class="form-control" name="description" cols="80"
         placeholder="Add a Description"
        ><%= task.description %></textarea>
      </div>
      <button class="btn btn-primary" type="submit">
       Update
      </button>
     </form>
    </div>
   </div>
  </div>
 </div>
</div>
<% include partials/_footer%>
```



String de conexão

mongodb+srv://betopinheiro1005:<password>@cluster-nodejs-mongodb-ulvuw.mongodb.net/crud-mongo?retryWrites=true&w=majority