Ocean node backend.md 2023-09-15

OCEAN_NODE_BACKEND

CONFIG/KEYS

```
module.exports = {
  mongoURI: "mongodb+srv://Sameer:1010@cluster0.kq5wym0.mongodb.net/test",
  secretOrKey: "secret",
};
```

CONFIG/PASSPORT

```
const JwtStrategy = require("passport-jwt").Strategy;
const ExtractJwt = require("passport-jwt").ExtractJwt;
const mongoose = require("mongoose");
const User = mongoose.model("users");
const keys = require("../config/keys");
const opts = {};
opts.jwtFromRequest = ExtractJwt.fromAuthHeaderAsBearerToken();
opts.secretOrKey = keys.secretOrKey;
module.exports = (passport) => {
 passport.use(
    new JwtStrategy(opts, (jwt_payload, done) => {
      User.findById(jwt_paylo.id)
        .then((user) => {
          if (user) {
            return done(null, user);
          return done(null, false);
        .catch((err) => console.log(err));
   })
  );
};
```

models/User

```
},
 email: {
   type: String,
   required: true,
 },
 password: {
   type: String,
   required: true,
 },
 Role: {
   type: String,
   required: true,
 },
 verified: {
   type: Boolean,
   default: false,
 },
     date: {
 //
       type: Date,
     required: Date.now(),
 //
     },
});
module.exports = User = mongoose.model("users", UserSchema);
```

routes\api\users.js

```
const express = require("express");
const router = express.Router();
const bcrypt = require("bcryptjs");
const jwt = require("jsonwebtoken");
const keys = require("../../config/keys");
const validateRegisterInput = require("../../validation/register");
const validateLoginInput = require("../../validation/login");
const User = require("../../models/User");
var mysql = require("mysql");
router.post("/schema", function (req, res, next) {
  res.header("Access-Control-Allow-Origin", "*");
  var connection = mysql.createConnection({
    host: req.body.name,
    port: req.body.port,
    user: req.body.user,
    password: req.body.password,
    database: req.body.database,
  });
  connection.query(
    "SELECT schema name FROM information schema.schemata",
    function (err, rows) {
      let result = Object.values(JSON.parse(JSON.stringify(rows)));
      res.status(200).json(rows);
    }
```

```
);
});
router.post("/database", function (req, res, next) {
 res.header("Access-Control-Allow-Origin", "*");
 var connection = mysql.createConnection({
   host: req.body.connectivity.name,
   port: req.body.connectivity.port,
   user: req.body.connectivity.user,
   password: req.body.connectivity.password,
   database: req.body.connectivity.database,
 });
 connection.query(
    `SELECT TABLE_NAME FROM information_schema.tables WHERE table_schema
='${req.body.databaseName}';`,
   function (err, rows) {
     res.status(200).json(rows);
   }
 );
});
router.post("/databaseTable", function (req, res, next) {
 res.header("Access-Control-Allow-Origin", "*");
 var connection = mysql.createConnection({
   host: req.body.connectivity.name,
   port: req.body.connectivity.port,
   user: req.body.connectivity.user,
   password: req.body.connectivity.password,
   database: req.body.connectivity.database,
 connection.query(
    `SELECT * FROM ${req.body.databaseName}.${req.body.databaseTableName}`,
   function (err, rows) {
     res.status(200).json(rows);
   }
 );
});
router.post("/queryGeneration", function (req, res, next) {
 res.header("Access-Control-Allow-Origin", "*");
 console.log(req.body);
 var connection = mysql.createConnection({
   host: req.body.connectivity.name,
   port: req.body.connectivity.port,
   user: req.body.connectivity.user,
   password: req.body.connectivity.password,
   database: req.body.connectivity.database,
 });
 connection.query(req.body.requestQuery, function (err, rows) {
   console.log(rows);
   res.status(200).json(rows);
 });
});
router.post("/forgotPassword", (req, res) => {
 // console.log(req.body);
```

```
const email = req.body.email;
 User.findOne({ email }).then((user) => {
   if (!user) {
     console.log("email not found");
      return res.json({ email: "Email not found", otp: "" });
    } else {
     console.log(user);
      return res.json({
        email: "Otp Send Succesfully",
       otp: req.body.otp,
       user: user,
     });
   }
 });
});
router.post("/updatePassword", (req, res) => {
 const email = req.body.email;
 console.log(req.body);
 User.findOne({ email }).then((user) => {
   if (!user) {
     console.log("email not found");
      return res.json({ email: "Email not found", otp: "" });
   } else {
     console.log(user.password);
     user.password = req.body.password;
     bcrypt.genSalt(10, (err, salt) => {
        bcrypt.hash(user.password, salt, (err, hash) => {
          user.password = hash;
          user.save().catch((err) => console.log(err));
       });
     });
     return res.json({ email: "user Exists", otp: req.body.otp, user: user });
   }
 });
});
router.post("/register", (req, res) => {
 const { errors, isValid } = validateRegisterInput(req.body);
 if (!isValid) {
   return res.status(400).json(errors);
 User.findOne({ email: req.body.email }).then((user) => {
   console.log(user, req);
   if (user) {
     return res.status(400).json({ email: "Email already exists" });
   } else {
      const newUser = new User({
        name: req.body.name,
        email: req.body.email,
        password: req.body.password,
       Role: req.body.Role,
     });
      console.log(newUser);
      bcrypt.genSalt(10, (err, salt) => {
        bcrypt.hash(newUser.password, salt, (err, hash) => {
```

```
newUser.password = hash;
          newUser
            .save()
            .then((user) => res.json(user))
            .catch((err) => console.log(err));
        });
      });
    }
 });
});
router.post("/login", (req, res) => {
 // console.log(res, res, "here");
 const { errors, isValid } = validateLoginInput(req.body);
 if (!isValid) {
    return res.status(400).json(errors);
  }
  const email = req.body.email;
  const password = req.body.password;
  User.findOne({ email }).then((user) => {
    if (!user) {
      return res.status(404).json({ emailnotfound: "Email not found" });
    }
    bcrypt.compare(password, user.password).then((isMatch) => {
      console.log(password, user.password);
      if (isMatch) {
        const payload = {
          id: user.id,
          name: user.name,
          Role: user.Role,
        };
        jwt.sign(
          payload,
          keys.secretOrKey,
            expiresIn: 31556929,
          },
          (err, token) => {
            res.json({
              success: true,
              token: "Bearer " + token,
            });
          }
        );
      } else {
        return res
          .status(400)
          .json({ passwordincorrect: "Password incorrect" });
      }
    });
  });
```

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```
});
module.exports = router;
```

validation\login.js

```
const Validator = require("validator");
const isEmpty = require("is-empty");
module.exports = function validateLoginInput(data) {
 let errors = {};
 data.email = !isEmpty(data.email) ? data.email : "";
 data.password = !isEmpty(data.password) ? data.password : "";
 if (Validator.isEmpty(data.email)) {
   errors.email = "Email Field is required";
  } else if (!Validator.isEmail(data.email)) {
    errors.email = "Email is invalid";
 if (Validator.isEmpty(data.password)) {
    errors.password = "Password field is required";
 return {
   errors,
   isValid: isEmpty(errors),
 };
};
```

validation\register.js

```
const Validator = require("validator");
const isEmpty = require("is-empty");
module.exports = function validateRegisterInput(data) {
 let errors = {};
 data.name = !isEmpty(data.name) ? data.name : "";
 data.email = !isEmpty(data.email) ? data.email : "";
 data.password = !isEmpty(data.password) ? data.password : "";
 data.password2 = !isEmpty(data.password2) ? data.password : "";
 data.Role = !isEmpty(data.Role) ? data.Role : "";
 if (Validator.isEmpty(data.name)) {
    errors.name = "Name Field is required";
  }
 if (Validator.isEmpty(data.email)) {
    errors.email = "Email Field is required";
  } else if (!Validator.isEmail(data.email)) {
    errors.email = "Email is Invalid";
```

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```
if (Validator.isEmpty(data.password)) {
   errors.password = "Password Field is required";
 }
 if (Validator.isEmpty(data.password2)) {
   errors.password2 = "Password Field is required";
 }
 if (!Validator.isLength(data.password, { min: 6, max: 30 })) {
   errors.password = "Password must be at least 6 characters";
 if (!Validator.equals(data.password, data.password2)) {
   errors.password2 = "Passwords must match";
 }
 if (Validator.isEmpty(data.Role)) {
   errors.name = "Role Field is required";
 return {
   errors,
   isValid: isEmpty(errors),
 };
};
```

views\error.ejs

```
<h1><%= message %></h1>
<h2><%= error.status %></h2>
<%= error.stack %>
```

views\indes.ejs

views\profile.ejs

```
<!DOCTYPE html>
<html lang="en">
 <head>
   <title>
    Node Js MySQL Fetch and Show Records from MySQL Database Example
   </title>
   <meta charset="UTF-8" />
   <meta name="viewport" content="width=device-width, initial-scale=1" />
   klink
href="https://cdn.jsdelivr.net/npm/bootstrap@5.1.3/dist/css/bootstrap.min.css"
    rel="stylesheet"
   />
 </head>
 <body>
   <div class="container mt-4">
    <% if (messages.success) { %>
    <%- messages.success %>
    <% } %>
    <br />
    <thead>
       >
         #Id
         Name
         Email
         Action
       </thead>
      <% if(data.length){ for(var i = 0; i< data.length; i++) {%>
         <%= (i+1) %>
         <%= data[i].name%>
         <<pre><</pre>
        <% } }else{ %>
        No data ever existed.
        <% } %>
      </div>
 </body>
</html>
```

package.json

```
"name": "ocean_beta_backend",
"version": "1.0.0",
"description": "",
"main": "server.js",
"scripts": {
  "start": "node server.js",
  "dev": "nodemon server.js"
},
"author": "",
"license": "ISC",
"dependencies": {
  "bcryptjs": "^2.4.3",
  "body-parser": "^1.20.2",
  "concurrently": "^7.6.0",
  "cookie-parser": "^1.4.6",
  "cors": "^2.8.5",
  "debug": "^4.3.4";
  "dotenv": "^16.0.3",
  "ejs": "^3.1.9",
  "express": "^4.18.2",
  "express-flash": "^0.0.2",
  "express-session": "^1.17.3",
  "express-validator": "^7.0.1",
  "http-errors": "^2.0.0",
  "is-empty": "^1.2.0",
  "jsonwebtoken": "^9.0.0",
  "mongodb": "^6.0.0",
  "mongoose": "^7.0.1",
  "morgan": "^1.10.0",
  "mysql": "^2.18.1",
  "nodemailer": "^6.9.4",
  "nodemon": "^2.0.22",
  "openai": "^3.2.1",
  "passport": "^0.6.0",
  "passport-jwt": "^4.0.1",
  "validator": "^13.9.0"
},
"engines": {
  "node": ">=14 <15"
}
```

server.js

```
const express = require("express");

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

```
const passport = require("passport");
const users = require("./routes/api/users");
const app = express();
const cors = require("cors");
require("dotenv").config();
var mysql = require("mysql");
var session = require("express-session");
var flash = require("express-flash");
var userRoute = require("./routes/api/users");
var path = require("path");
var logger = require("morgan");
var cookieParser = require("cookie-parser");
app.set("view engine", "ejs");
app.use(logger("dev"));
app.use(bodyParser.json());
app.use(cookieParser());
app.use(bodyParser.urlencoded({ extended: true }));
app.use(express.static(path.join(__dirname, "public")));
const BASE_URL = process.env.BASE_URL;
const { MongoClient, ServerApiVersion } = require("mongodb");
const { modelName } = require("./models/User");
const db = require("./config/keys").mongoURI;
app.options("*", cors());
//
app.use(
 bodyParser.urlencoded({
    extended: false,
 })
);
const url =
  "mongodb+srv://Sameer:1010@cluster0.kq5wym0.mongodb.net/?
retryWrites=true&w=majority";
const client = new MongoClient(url);
// Database Name
const dbName = "test";
async function main() {
  // Use connect method to connect to the server
  await client.connect();
  console.log("Connected successfully to server");
  const db = client.db("test");
  const collection = db.collection("users");
  console.log(collection);
  // the following code examples can be pasted here...
  return "done.";
}
main()
  .then((res) => console.log(res, "Sssssssss"))
```

```
.catch(console.error)
  .finally(() => client.close());
const corsOptions = {
  origin: process.env.BASE_URL,
  credentials: true,
  allowedHeaders: ["sessionId", "Content-Type"],
  exposedHeaders: ["sessionId"],
  methods: "GET, HEAD, PUT, PATCH, POST, DELETE",
  preflightContinue: false,
}; //
app.use(
  session({
    secret: "123@abcd",
    resave: false,
    saveUninitialized: true,
    cookie: { maxAge: 60000 },
 })
);
app.use(flash());
// app.use("/", nodeRoutes);
// app.use("/database", userRoute);
// app.use(function (req, res, next) {
// next(createError(404));
// });
app.use(function (err, req, res, next) {
  res.locals.message = err.message;
  res.locals.error = req.app.get("env") === "development" ? err : {};
  res.status(err.status | 500);
  res.render("error");
});
app.use(cors(corsOptions));
app.use((req, res, next) => {
  res.setHeader("Access-Control-Allow-Origin", "*");
  res.header(
    "Access-Control-Allow-Headers",
    "Origin, X-Requested-With, Content-Type, Accept"
  );
  next();
app.use(bodyParser.json());
// const db = process.env.DATABASE;
app.get("/", (req, res) => {
  res.status(201).json("server started");
});
var collections = mongoose.connections[0].collections;
var names = [];
console.log(collections);
Object.values(collections).forEach(function (k) {
  console.log(k);
  names.push(k);
});
```

```
console.log(names);
mongoose
   .connect(db, { useNewUrlParser: true })
   .then((res) => console.log("Mongoose Connected"))
   .catch((err) => console.log(err));
app.use(passport.initialize());

require("./config/passport")(passport);
app.use("/api/users", users);
const port = process.env.PORT || 5001;
console.log(port);
app.listen(port, () => console.log(`server running on port ${port}`));
```