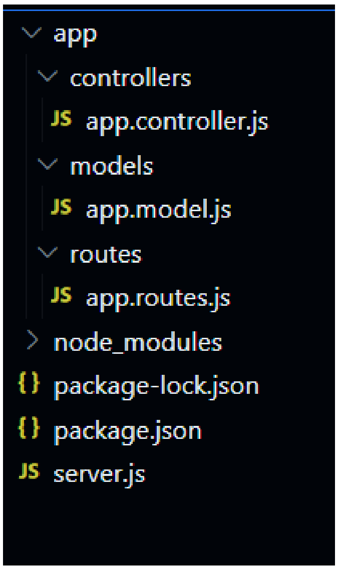
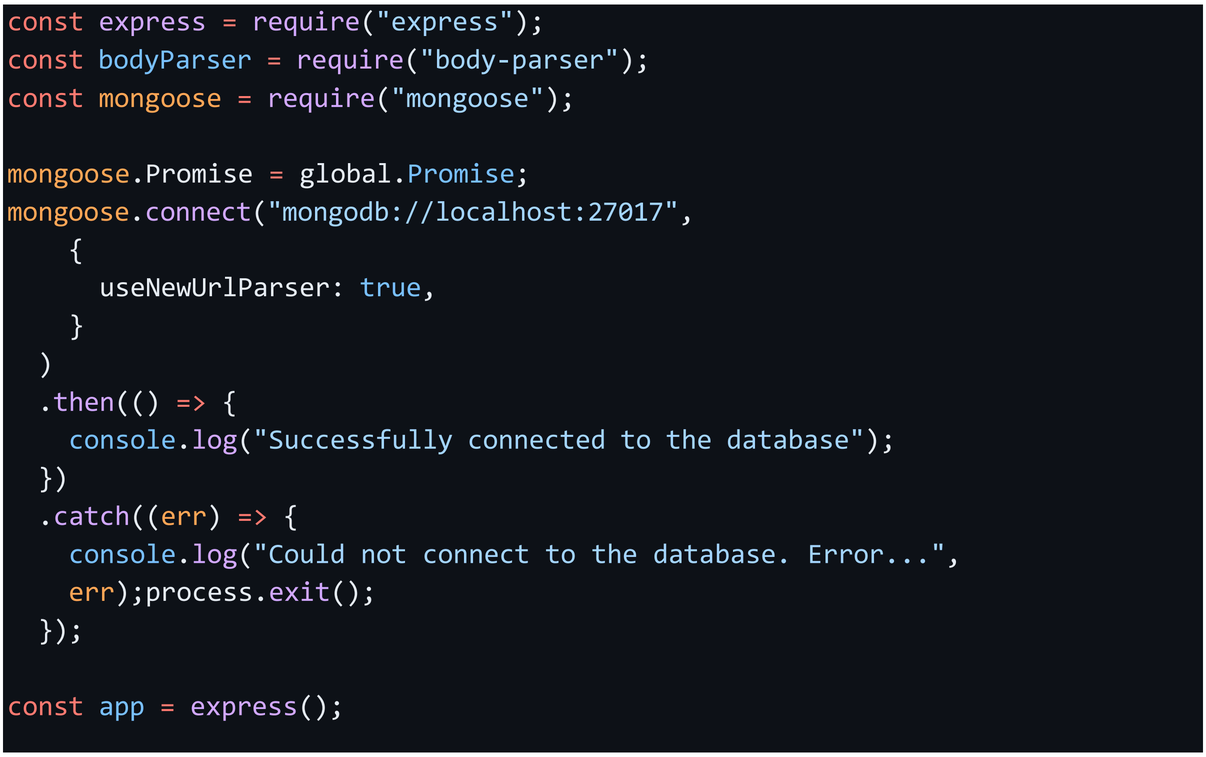
LA8: Building a REST API with Express, Node, and MongoDB

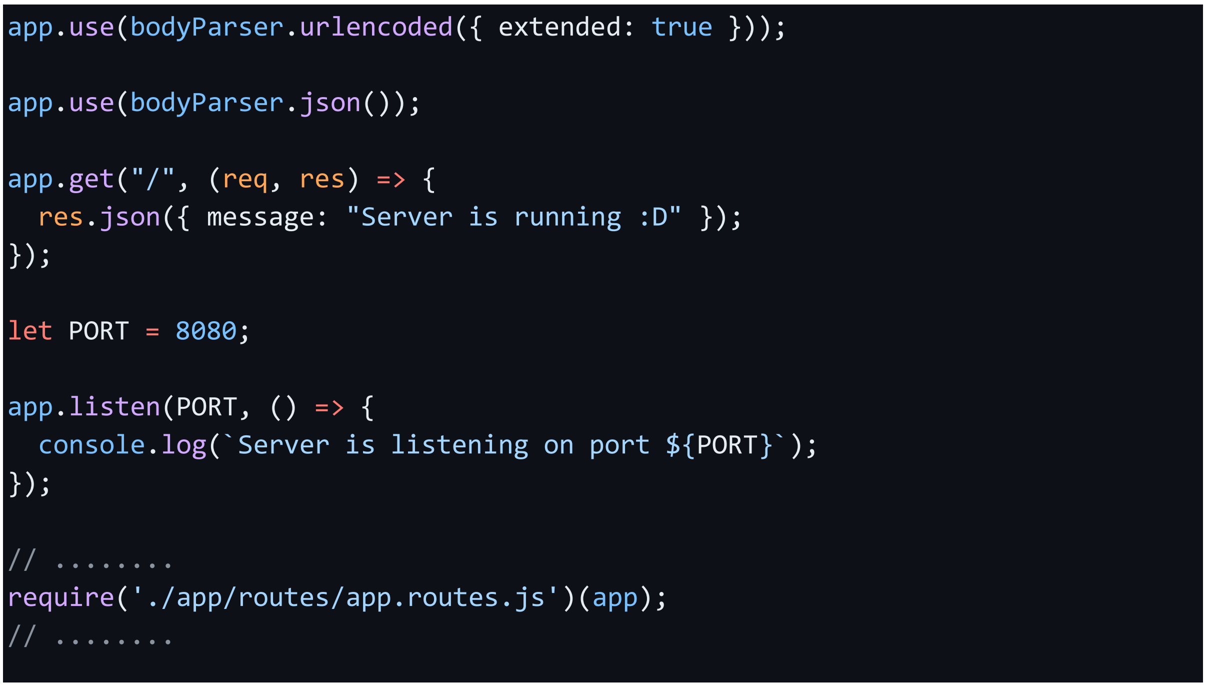


```
app
  controllers
    app.controller.js
  models
    app.model.js
  routes
    app.routes.js
node_modules
package-lock.json
package.json
server.js
```

Server.js

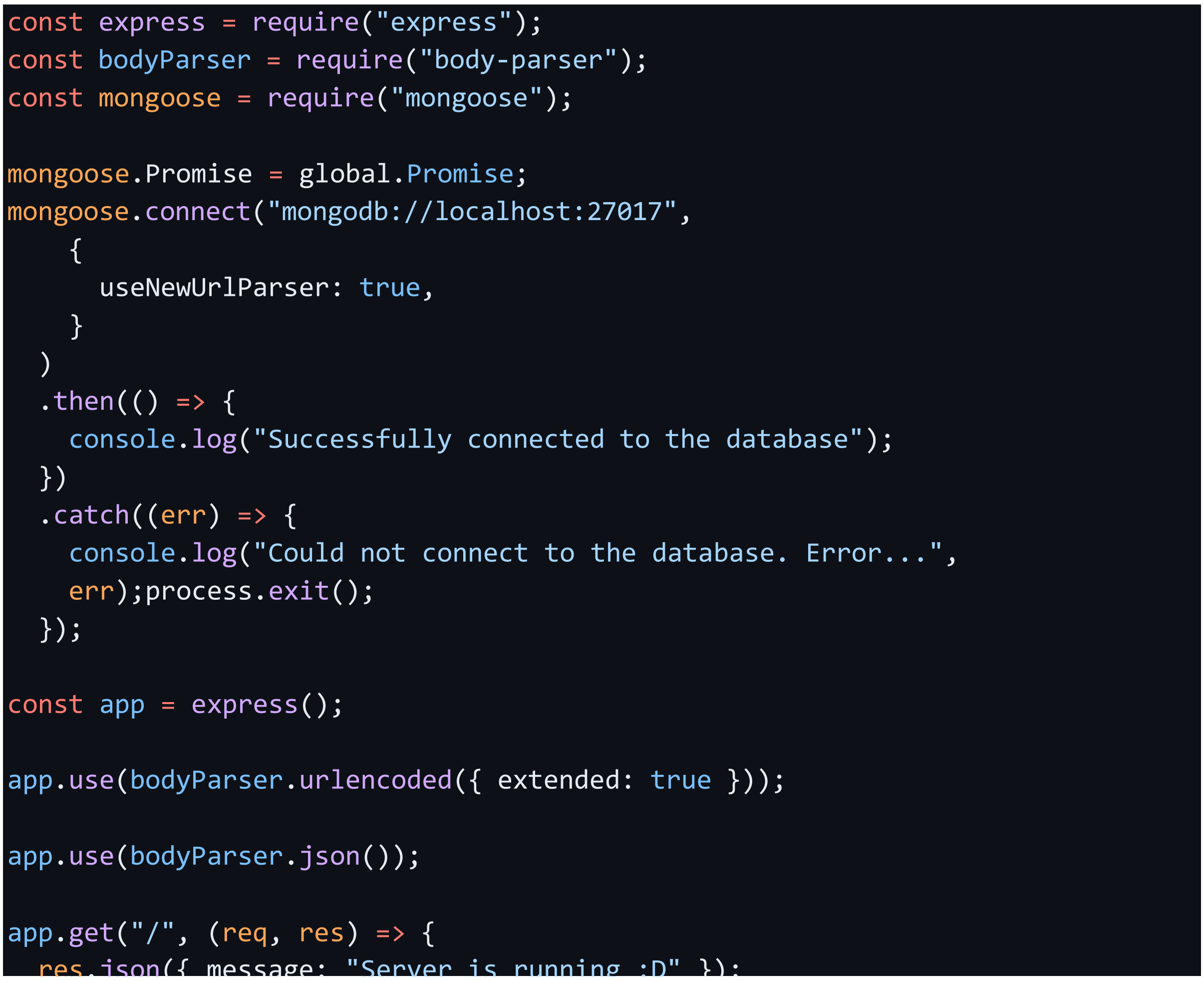


```
const express = require("express");
const bodyParser = require("body-parser");
const mongoose = require("mongoose");

mongoose.Promise = global.Promise;
mongoose.connect("mongodb://localhost:27017",
    {
      useNewUrlParser: true,
    }
  )
  .then(() => {
    console.log("Successfully connected to the database");
  })
  .catch((err) => {
    console.log("Could not connect to the database. Error...",
    err);process.exit();
  });

const app = express();
```

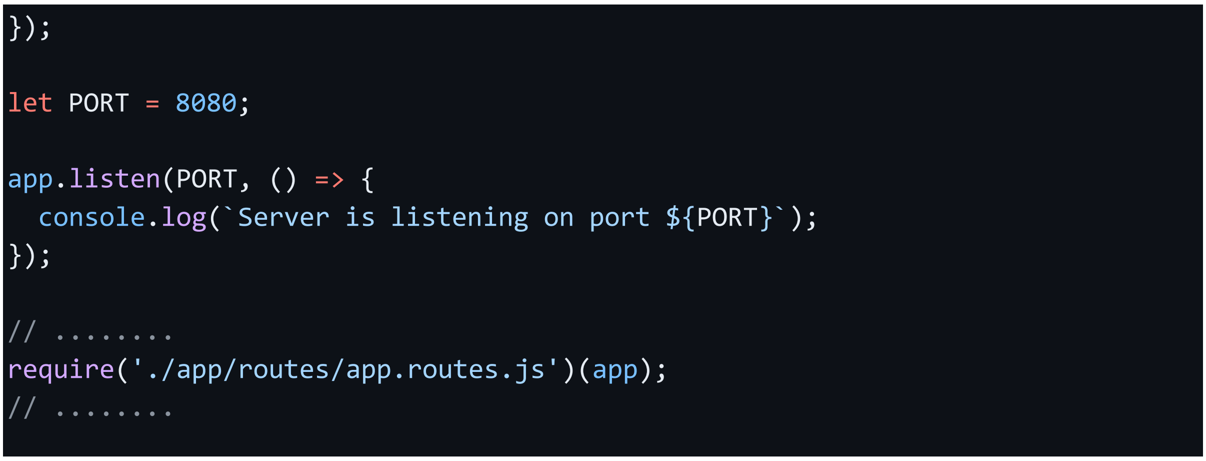


```
app.use(bodyParser.urlencoded({ extended: true }));

app.use(bodyParser.json());

app.get("/", (req, res) => {
  res.json({ message: "Server is running :D" });
});

let PORT = 8080;

app.listen(PORT, () => {
  console.log(`Server is listening on port ${PORT}`);
});

// ........
require('./app/routes/app.routes.js')(app);
// ........
```

App.routes.js

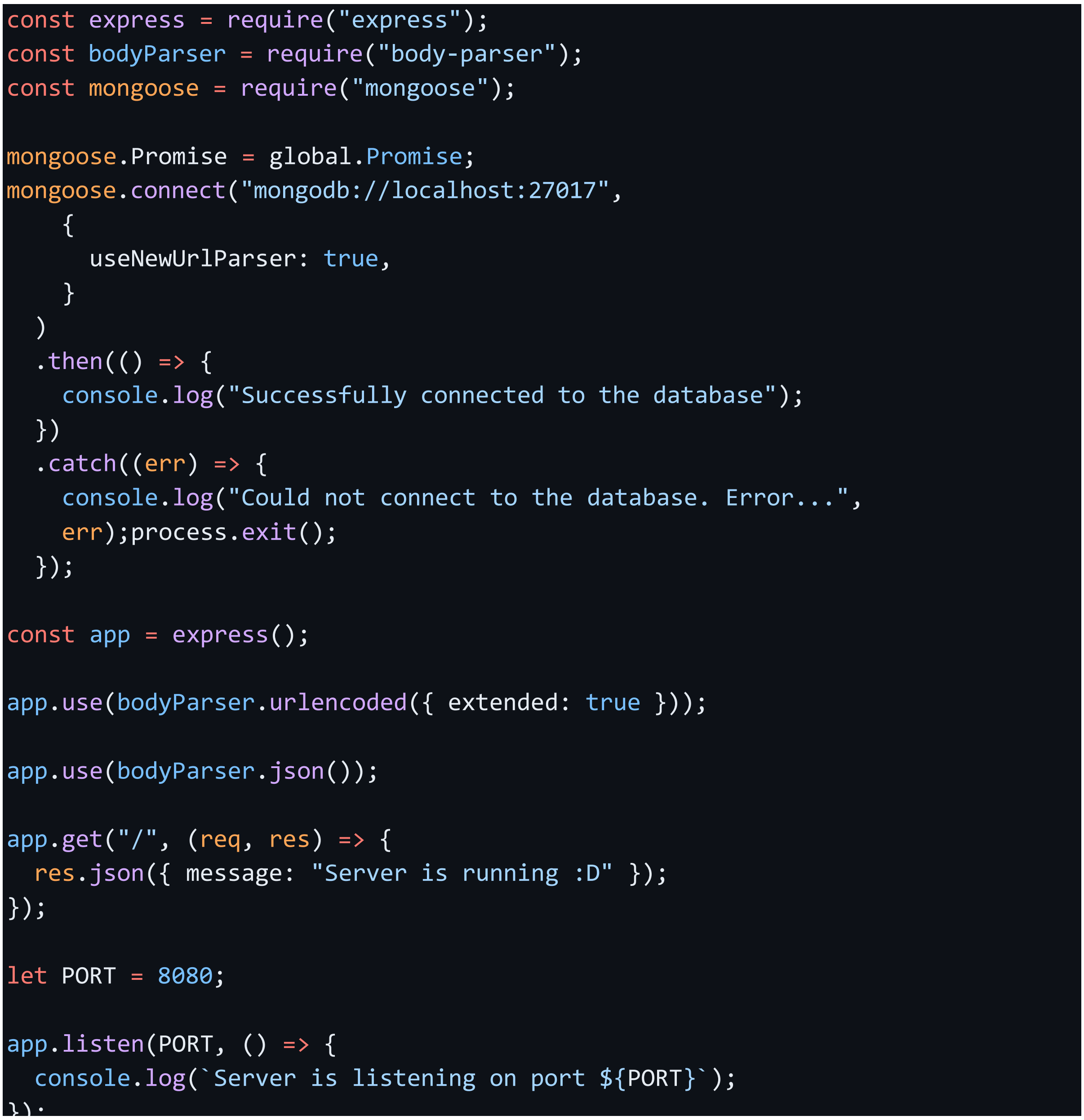


```
const express = require("express");
const bodyParser = require("body-parser");
const mongoose = require("mongoose");

mongoose.Promise = global.Promise;
mongoose.connect("mongodb://localhost:27017",
    {
      useNewUrlParser: true,
    }
  )
  .then(() => {
    console.log("Successfully connected to the database");
  })
  .catch((err) => {
    console.log("Could not connect to the database. Error...",
    err);process.exit();
  });

const app = express();

app.use(bodyParser.urlencoded({ extended: true }));

app.use(bodyParser.json());

app.get("/", (req, res) => {
  res.json({ message: "Server is running :D" });
```

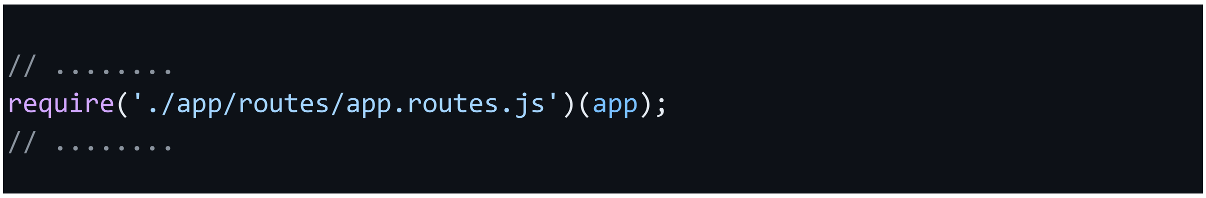


```
});

let PORT = 8080;

app.listen(PORT, () => {
  console.log(`Server is listening on port ${PORT}`);
});

// ........
require('./app/routes/app.routes.js')(app);
// ........
```

App.model.js

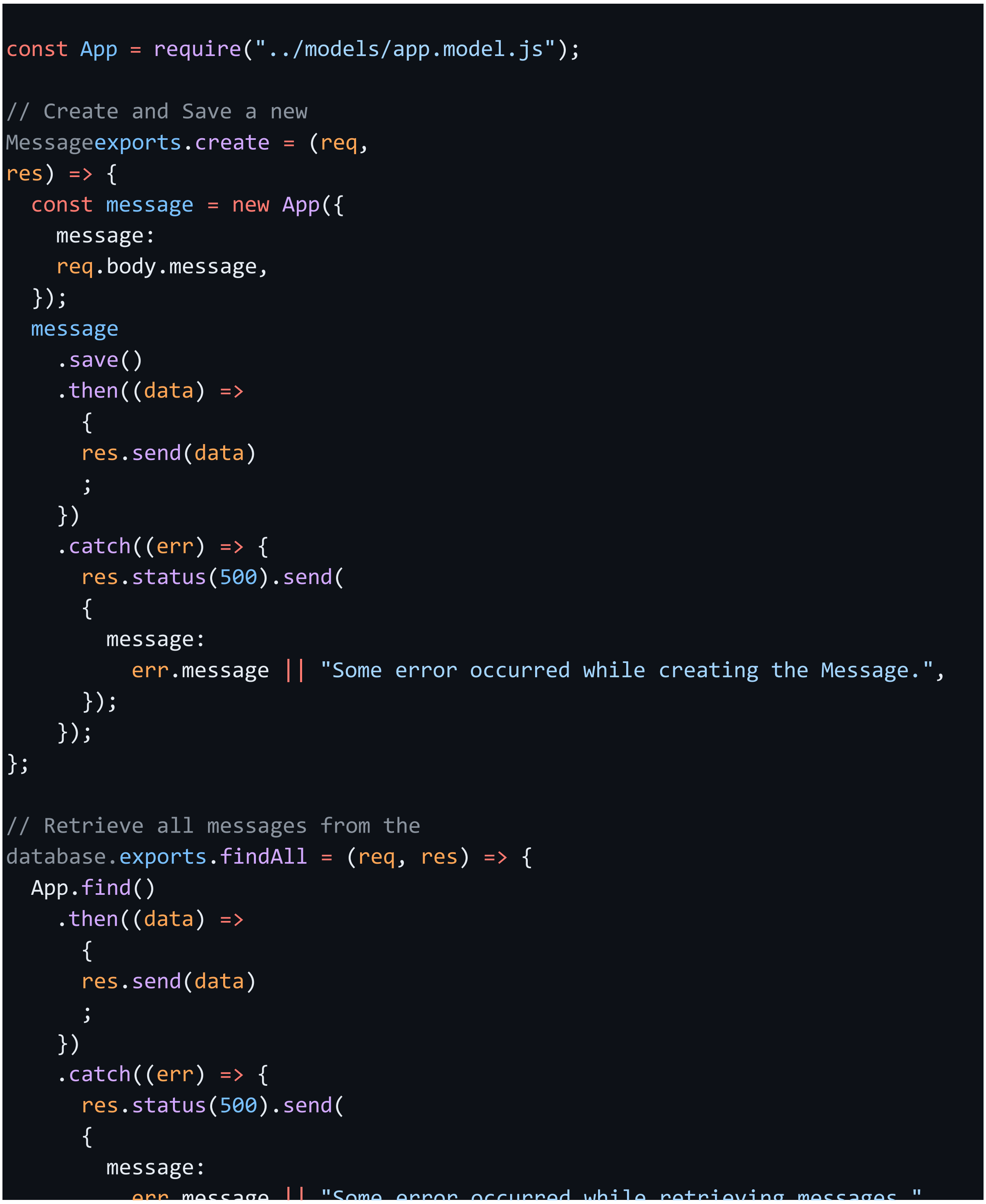


```
const express = require("express");
const bodyParser = require("body-parser");
const mongoose = require("mongoose");

mongoose.Promise = global.Promise;
mongoose.connect("mongodb://localhost:27017",
    {
      useNewUrlParser: true,
    }
  )
  .then(() => {
    console.log("Successfully connected to the database");
  })
  .catch((err) => {
    console.log("Could not connect to the database. Error...",
    err);process.exit();
  });

const app = express();

app.use(bodyParser.urlencoded({ extended: true }));

app.use(bodyParser.json());

app.get("/", (req, res) => {
  res.json({ message: "Server is running :D" });
});

let PORT = 8080;

app.listen(PORT, () => {
  console.log(`Server is listening on port ${PORT}`);
});
```

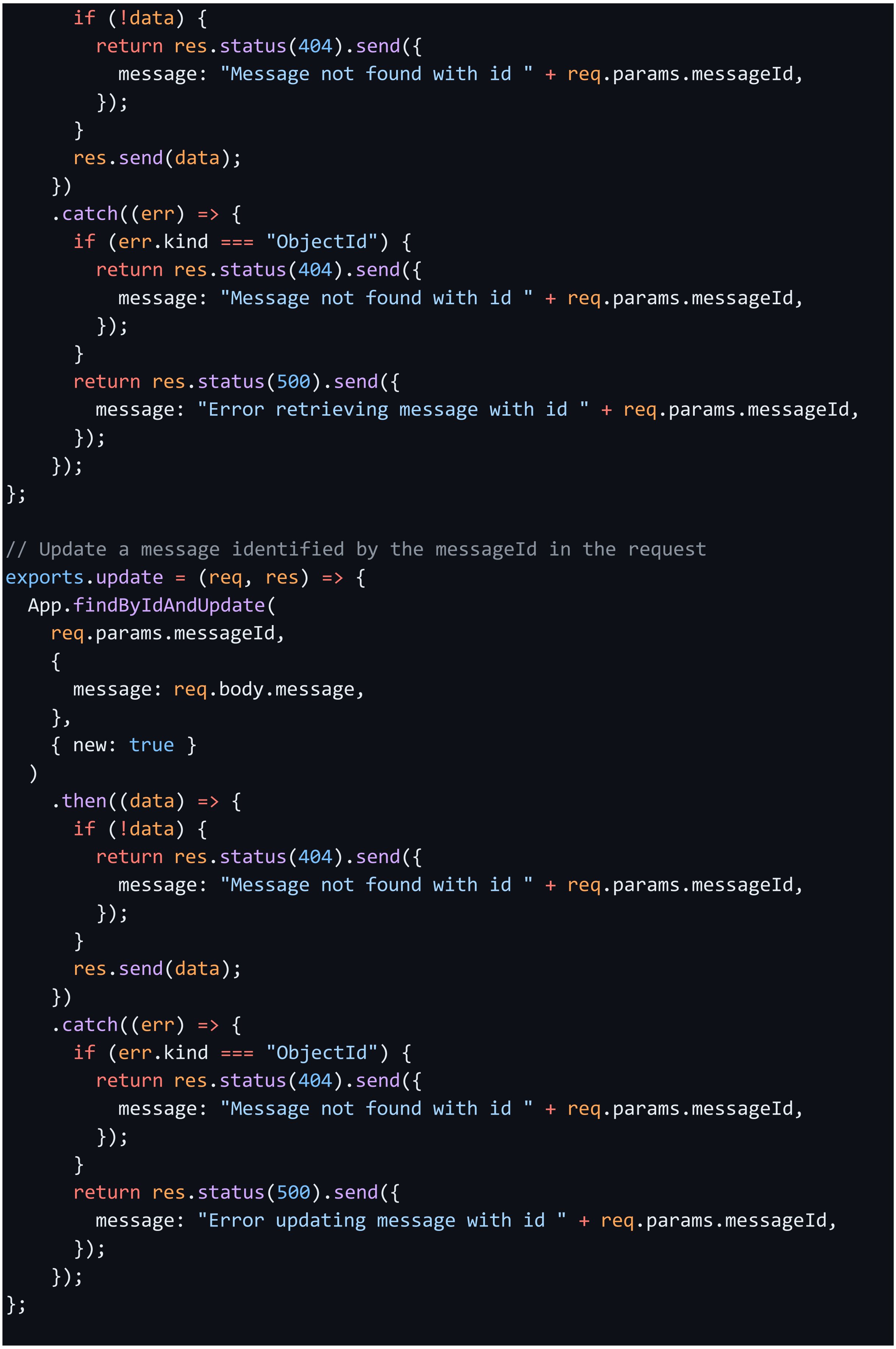


```
// ........
require('./app/routes/app.routes.js')(app);
// ........
```

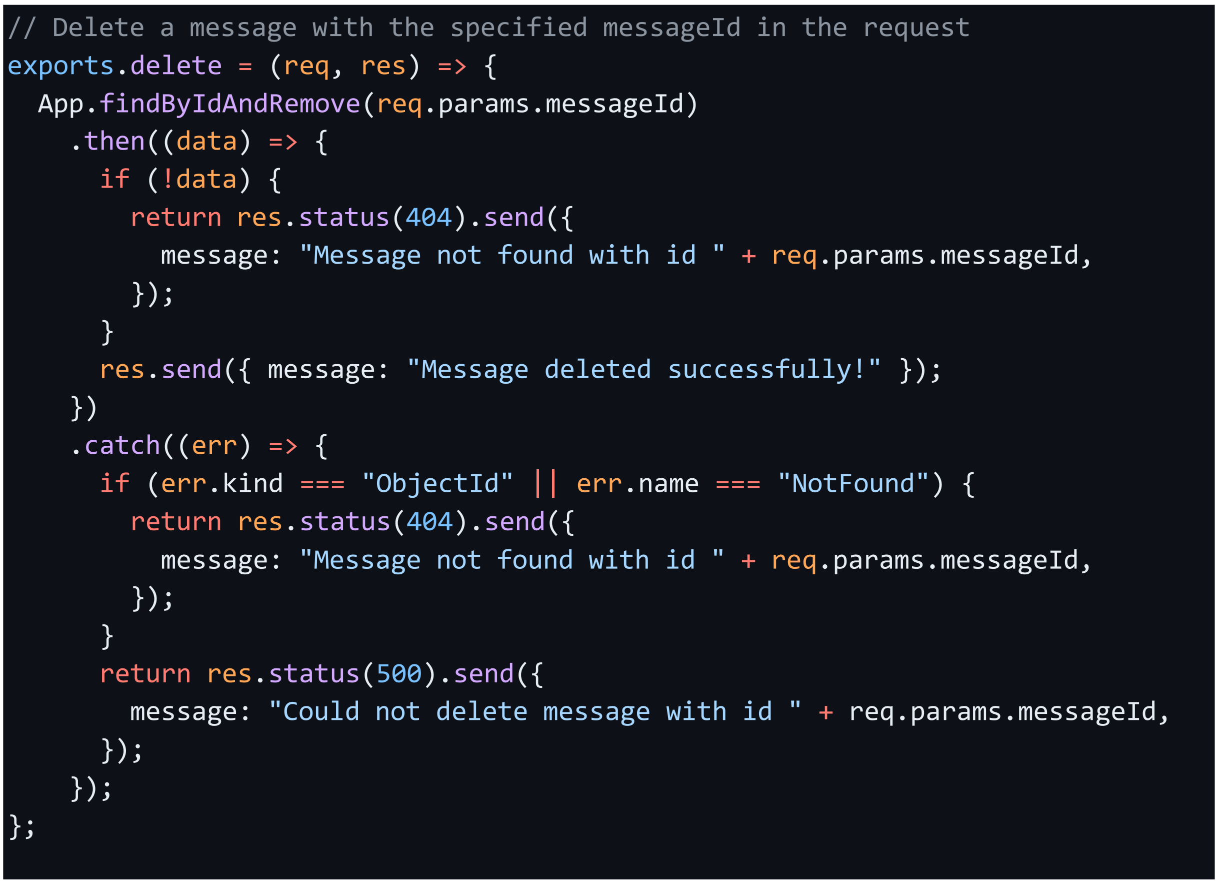
App.controller.js



```
const App = require("../models/app.model.js");

// Create and Save a new
Messageexports.create = (req,
res) => {
  const message = new App({
    message:
    req.body.message,
  });
  message
    .save()
    .then((data) =>
      {
      res.send(data)
      ;
    })
    .catch((err) => {
      res.status(500).send(
      {
        message:
          err.message || "Some error occurred while creating the Message.",
      });
    });
};

// Retrieve all messages from the
database.exports.findAll = (req, res) => {
  App.find()
    .then((data) =>
      {
      res.send(data)
      ;
    })
    .catch((err) => {
      res.status(500).send(
      {
        message:
          err.message || "Some error occurred while retrieving messages."
```



```
      if (!data) {
        return res.status(404).send({
          message: "Message not found with id " + req.params.messageId,
        });
      }
      res.send(data);
    })
    .catch((err) => {
      if (err.kind === "ObjectId") {
        return res.status(404).send({
          message: "Message not found with id " + req.params.messageId,
        });
      }
      return res.status(500).send({
        message: "Error retrieving message with id " + req.params.messageId,
      });
    });
};

// Update a message identified by the messageId in the request
exports.update = (req, res) => {
  App.findByIdAndUpdate(
    req.params.messageId,
    {
      message: req.body.message,
    },
    { new: true }
  )
    .then((data) => {
      if (!data) {
        return res.status(404).send({
          message: "Message not found with id " + req.params.messageId,
        });
      }
      res.send(data);
    })
    .catch((err) => {
      if (err.kind === "ObjectId") {
        return res.status(404).send({
          message: "Message not found with id " + req.params.messageId,
        });
      }
      return res.status(500).send({
        message: "Error updating message with id " + req.params.messageId,
      });
    });
};
```



```
// Delete a message with the specified messageId in the request
exports.delete = (req, res) => {
  App.findByIdAndRemove(req.params.messageId)
    .then((data) => {
      if (!data) {
        return res.status(404).send({
          message: "Message not found with id " + req.params.messageId,
        });
      }
      res.send({ message: "Message deleted successfully!" });
    })
    .catch((err) => {
      if (err.kind === "ObjectId" || err.name === "NotFound") {
        return res.status(404).send({
          message: "Message not found with id " + req.params.messageId,
        });
      }
      return res.status(500).send({
        message: "Could not delete message with id " + req.params.messageId,
      });
    });
};
```