

0.-----

Having the following application developed using NodeJS, complete the `POST` method on path `/ships` :

- If no request body is present you should return a json with the following format: `{"message": "body is missing"}`. Response status code should be: `400`; (0.5 pts)
- If the request body properties are missing you should return a json with the following format: `{"message": "malformed request"}`. Response status code should be: `400`; (0.5 pts)
- Displacement should be over 1000, otherwise the server should return a message with the following format: `{"message": "displacement should be over 1000"}`. Response status code should be: `400`; (0.5 pts)
- If the ship is valid, it should be added and a response with the code `201` should be returned. The response body should be `{"message": "created"}`;(0.5 pts)
- If a `GET /ships` request is performed subsequently, the body should contain 11 `ships`, including the one previously added; (0.5 pts)

```
const express = require('express')
```

```
const bodyParser = require('body-parser')
```

```
const Sequelize = require('sequelize')
```

```
const mysql = require('mysql2/promise')
```

```
const DB_USERNAME = 'DB_USER'
```

```
const DB_PASSWORD = 'DB_PASS'
```

```
let conn
```

```
mysql.createConnection({
```

```
  user: DB_USERNAME,
```

```
  password: DB_PASSWORD
```

```
})
```

```
  .then((connection) => {
```

```
    conn = connection
```

```
    return connection.query('CREATE DATABASE IF NOT EXISTS tw_exam')
```

```
  })
```

```
  .then(() => {
```

```
    return conn.end()
```

```
  })
```

```
  .catch((err) => {
```

```
    console.warn(err.stack)
```

```
  })
```

```
const sequelize = new Sequelize('tw_exam', DB_USERNAME, DB_PASSWORD, {
```

```
  dialect: 'mysql',
```

```
  logging: false
```

```
})
```

```
let Ship = sequelize.define('student', {
```

```
  name: Sequelize.STRING,
```

```
  portOfSail: Sequelize.STRING,
```

```
  displacement: Sequelize.INTEGER
```

```
}, {
```

```
  timestamps: false
```

```
})
```

```
const app = express()
```

```
app.use(bodyParser.json())
```

```

app.get('/create', async (req, res) => {
  try {
    await sequelize.sync({ force: true })
    for (let i = 0; i < 10; i++) {
      let ship = new Ship({
        name: `name${i}`,
        portOfSail: `port ${i}`,
        displacement: 3000 + 10 * i
      })
      await ship.save()
    }
    res.status(201).json({ message: 'created' })
  }
  catch (err) {
    console.warn(err.stack)
    res.status(500).json({ message: 'server error' })
  }
})

app.get('/ships', async (req, res) => {
  try {
    let ships = await Ship.findAll()
    res.status(200).json(ships)
  }
  catch (err) {
    console.warn(err.stack)
    res.status(500).json({ message: 'server error' })
  }
})

app.post('/ships', async (req, res) => {
  if (Object.keys(req.body).length===0) {
    res.status(400).json({ message: "body is missing" })
    return
  }
  if (!req.body.name || !req.body.portOfSail || !req.body.displacement) {
    res.status(400).json({ message: "malformed request" })
    return
  }

  if (req.body.displacement < 1000) {
    res.status(400).json({ message: "displacement should be over 1000" })
    return
  }

  let sh=new Ship(req.body)

  sh.save()

  res.status(201).json({message: "created"})

})

module.exports = app

```

1.-----

Having the following application developed using NodeJS, complete the `PUT` and `DELETE` methods on path `/ships/id` :

- If attempting to update a non existent ship the response should be `{"message": "not found"}`. Response status code should be: `404`; (0.5 pts)
- If correctly updating an existent ship the response should be: `{"message": "accepted"}`. Response status code should be: `202`; (0.5 pts)
- A subsequent request for the edited ship should show the modifications. Response status code should be: `200`; (0.5 pts)
- If correctly deleting an existent ship the response should be: `{"message": "accepted"}`. Response status code should be: `202`; (0.5 pts)
- A subsequent request for the deleted ship should return `{"message": "not found"}`. Response status code should be: `404`; (0.5 pts)

```
const express = require('express')
const bodyParser = require('body-parser')
const Sequelize = require('sequelize')
```

```
const mysql = require('mysql2/promise')
```

```
const DB_USERNAME = 'root'
const DB_PASSWORD = 'pass'
```

```
let conn
```

```
mysql.createConnection({
  user : DB_USERNAME,
  password : DB_PASSWORD
})
.then((connection) => {
  conn = connection
  return connection.query('CREATE DATABASE IF NOT EXISTS tw_exam')
})
.then(() => {
  return conn.end()
})
.catch((err) => {
  console.warn(err.stack)
})
```

```
const sequelize = new Sequelize('tw_exam', DB_USERNAME, DB_PASSWORD, {
  dialect : 'mysql',
  logging: false
})
```

```
let Ship = sequelize.define('student', {
  name : Sequelize.STRING,
  portOfSail : Sequelize.STRING,
  displacement : Sequelize.INTEGER
},{
  timestamps : false
})
```

```
const app = express()
app.use(bodyParser.json())
```

```
app.get('/create', async (req, res) => {
  try{
```

```

        await sequelize.sync({force : true})
        for (let i = 0; i < 10; i++){
            let ship = new Ship({
                name : `name${i}`,
                portOfSail : `port ${i}`,
                displacement : 3000 + 10 * i
            })
            await ship.save()
        }
        res.status(201).json({message : 'created'})
    }
    catch(err){
        console.warn(err.stack)
        res.status(500).json({message : 'server error'})
    }
})

app.get('/ships/:id', async (req, res) => {
    try{
        let ship = await Ship.findByPk(req.params.id)
        if (!ship){
            res.status(404).json({message : 'not found'})
        }
        else{
            res.status(200).json(ship)
        }
    }
    catch(err){
        console.warn(err.stack)
        res.status(500).json({message : 'server error'})
    }
})

app.put('/ships/:id', async (req, res) => {
    Ship.findByPk(req.params.id)
    .then((ship) => {
        if (ship) {
            ship.update(req.body).then((result)=> {
                res.status(202).json({message: "accepted"})
            })
        } else {
            res.status(404).json({message : 'not found'})
        }
    }).catch((err) => {
        console.log(err)
        console.status(500).send('database error')
    })
})

app.delete('/ships/:id', async (req, res) => {

    Ship.findByPk(req.params.id)
    .then((ship) => {
        if (ship) {
            ship.destroy().then((result) => {
                res.status(202).json({message: "accepted"})
            })
        }
    })
})

```

```

        })
      } else {
        res.status(404).json({message : 'not found'})
      }
    }).catch((err) => {
      console.log(err)
    })
  })
})

module.exports = app

```

2.-----

Having the following application developed using NodeJS, complete the `GET` method on path `/ships` :

- supported query params are `page` and `pageSize`
- If no page or page size is specified, all ships are returned; (0.5 pts)
- If a page is specified, but no page size, the page size is assumed to be 5 and the nth page of 5 is returned (0.5 pts)
- If both page and page size are specified, the page-th page of the specified size is returned (0.5 pts)
- If a malformed page or page size is specified, all ships are returned; (0.5 pts)
- If the specified page is beyond the last available record, an empty array of pages is returned. (0.5 pts)

```

const express = require('express')
const bodyParser = require('body-parser')
const Sequelize = require('sequelize')

const mysql = require('mysql2/promise')

const DB_USERNAME = 'root'
const DB_PASSWORD = 'pass'

let conn

mysql.createConnection({
  user : DB_USERNAME,
  password : DB_PASSWORD
})
.then((connection) => {
  conn = connection
  return connection.query('CREATE DATABASE IF NOT EXISTS tw_exam')
})
.then(() => {
  return conn.end()
})
.catch((err) => {
  console.warn(err.stack)
})

const sequelize = new Sequelize('tw_exam', DB_USERNAME, DB_PASSWORD, {
  dialect : 'mysql',
  logging: false

```

```

})

let Ship = sequelize.define('student', {
  name : Sequelize.STRING,
  portOfSail : Sequelize.STRING,
  displacement : Sequelize.INTEGER
},{
  timestamps : false
})

const app = express()
app.use(bodyParser.json())

app.get('/create', async (req, res) => {
  try{
    await sequelize.sync({force : true})
    for (let i = 0; i < 10; i++){
      let ship = new Ship({
        name : `name${i}`,
        portOfSail : `port ${i}`,
        displacement : 3000 + 10 * i
      })
      await ship.save()
    }
    res.status(201).json({message : 'created'})
  }
  catch(err){
    console.warn(err.stack)
    res.status(500).json({message : 'server error'})
  }
})

app.get('/ships', async (req, res) => {
  //1.
  if ((!req.query.pageNo && !req.query.pageSize)) {
    const ships = await Ship.findAll()
    return res.status(200).send(ships)
  }
  //2.
  if (req.query.pageNo && !req.query.pageSize) {
    const ships = await Ship.findAll({
      limit: 5,
      offset: req.query.pageNo * 5
    })
    return res.status(200).send(ships)
  }
  //3.
  if (req.query.pageNo && req.query.pageSize) {
    //4.
    if ((isNaN(req.query.pageNo) || isNaN(req.query.pageSize))) {
      const ships = await Ship.findAll()
      return res.status(200).send(ships)
    }
    //5.
    const ships = await Ship.findAll({
      offset: req.query.pageNo * req.query.pageSize,

```

```

        limit: parseInt(req.query.pageSize, 10)
    })
    return res.status(200).send(ships)
}
})

app.post('/ships', async (req, res) => {
    try{
        let ship = new Ship(req.body)
        await ship.save()
        res.status(201).json({message : 'created'})
    }
    catch(err){
        res.status(500).json({message : 'server error'})
    }
})

module.exports = app

```

3.-----

```

# Having the `app.js` file complete `POST` and `DELETE` methods on paths `/device`
and `/device/:id`:
- `POST /device` returns status code 400 and response `{message: 'bad request'}` if
`body` is null (0.5 pts);
- `POST /device` returns status code 400 and response `{message: 'bad request'}` if
`price < 0` (0.5 pts);
- `POST /device` returns status code 400 and response `{message: 'bad request'}` if
`name` contains less than 4 characters` (0.5 pts);
- `POST /device` returns status code 201 and response `{message: "device created"}`
if `body` is valid` (0.5 pts);
- `DELETE /device/:id` returns status code 202 and response `{message: "device
deleted"}` if `id` for a device is present in the database (0.5 pts);
const express = require('express')
const bodyParser = require('body-parser')
const Sequelize = require('sequelize')

const mysql = require('mysql2/promise')

const DB_USERNAME = 'root'
const DB_PASSWORD = 'pass'

let conn

mysql.createConnection({
    user : DB_USERNAME,
    password : DB_PASSWORD
})
.then((connection) => {
    conn = connection
    return connection.query('CREATE DATABASE IF NOT EXISTS tw_exam')
})
.then(() => {
    return conn.end()
})
.catch((err) => {
    console.warn(err.stack)
})

const sequelize = new Sequelize('tw_exam', DB_USERNAME, DB_PASSWORD, {

```

```

    dialect : 'mysql',
    logging: false
  })

let Ship = sequelize.define('student', {
  name : Sequelize.STRING,
  portOfSail : Sequelize.STRING,
  displacement : Sequelize.INTEGER
},{
  timestamps : false
})

const app = express()
app.use(bodyParser.json())

app.get('/create', async (req, res) => {
  try{
    await sequelize.sync({force : true})
    for (let i = 0; i < 10; i++){
      let ship = new Ship({
        name : `name${i}`,
        portOfSail : `port ${i}`,
        displacement : 3000 + 10 * i
      })
      await ship.save()
    }
    res.status(201).json({message : 'created'})
  }
  catch(err){
    console.warn(err.stack)
    res.status(500).json({message : 'server error'})
  }
})

app.get('/ships/:id', async (req, res) => {
  try{
    let ship = await Ship.findByPk(req.params.id)
    if (!ship){
      res.status(404).json({message : 'not found'})
    }
    else{
      res.status(200).json(ship)
    }
  }
  catch(err){
    console.warn(err.stack)
    res.status(500).json({message : 'server error'})
  }
})

app.put('/ships/:id', async (req, res) => {
  Ship.findByPk(req.params.id)
  .then((ship) => {
    if (ship) {
      ship.update(req.body).then((result)=> {
        res.status(202).json({message: "accepted"})
      })
    }
  })
})

```



```

        } else {
            res.status(404).json({message : 'not found'})
        }
    }).catch((err) => {
        console.log(err)
        console.status(500).send('database error')
    })
})

app.delete('/ships/:id', async (req, res) => {

    Ship.findByPk(req.params.id)
    .then((ship) => {
        if (ship) {
            ship.destroy().then((result) => {
                res.status(202).json({message: "accepted"})
            })
        } else {
            res.status(404).json({message : 'not found'})
        }
    }).catch((err) => {
        console.log(err)
    })

})

})

```

```
module.exports = app
```

4.-----

Having the following `app` complete the method `GET` at the endpoint `/homeworks` and the method `GET` at the endpoint `/homeworks/id` so that:

- when GET /homeworks is called without any params it will return all entries in the database (0.5p)
- when GET /homeworks is called with the param pass=true it will return all homeworks that are >= 5 (0.5p)
- when GET /homeworks/id is called with a id not present in the database will return status code `404` (0.5p)
- when GET /homeworks/id is called with a valid id will return a json object (0.5p)
- given that the client only accepts `text/plain` GET /homeworks/id will return only the content

```

const express = require('express')
const bodyParser = require('body-parser')
const Sequelize = require('sequelize')

```

```
const mysql = require('mysql2/promise')
```

```

const DB_USERNAME = 'root'
const DB_PASSWORD = 'pass'

```

```
let conn
```

```
mysql.createConnection({
```

```

    user : DB_USERNAME,
    password : DB_PASSWORD
  })
  .then((connection) => {
    conn = connection
    return connection.query('CREATE DATABASE IF NOT EXISTS tw_exam')
  })
  .then(() => {
    return conn.end()
  })
  .catch((err) => {
    console.warn(err.stack)
  })
})

const sequelize = new Sequelize('tw_exam', DB_USERNAME, DB_PASSWORD, {
  dialect : 'mysql',
  logging: false
})

let Homework = sequelize.define('homework', {
  student : Sequelize.STRING,
  content : Sequelize.STRING,
  grade : Sequelize.INTEGER
},{
  timestamps : false
})

const app = express()
app.use(bodyParser.json())

app.get('/create', async (req, res) => {
  try{
    await sequelize.sync({force : true})
    const grades = [2, 5, 7, 7, 3, 10, 9, 4, 10, 8]
    for (let i = 0; i < 10; i++){
      let homework = new Homework({
        student : `name${i}`,
        content : `some text here ${i}`,
        grade : grades[i]
      })
      await homework.save()
    }
    res.status(201).json({message : 'created'})
  }
  catch(err){
    console.warn(err.stack)
    res.status(500).json({message : 'server error'})
  }
})

app.get('/homeworks', async (req, res) => {
  try{
    if (Object.keys(req.query).length === 0) {
      const homeworks = await Homework.findAll()
      if (!homeworks) {
        return res.status(404).send({ message: "not found" })
      }
    }
  }

```

```

        return res.status(200).send(homeworks)
    }

    if (req.query.pass == 'true') {
        const homeworks = await Homework.findAll({
            where: {
                grade: {
                    [Sequelize.Op.gte]: 5
                }
            }
        })
        return res.status(200).send(homeworks)
    }
}

catch(err){
    console.warn(err.stack)
    res.status(500).json({message : 'server error'})
}

})

app.get('/homeworks/:id', async (req, res) => {
    try{
        let hw = await Homework.findByPk(req.params.id)
        if (!hw){
            return res.status(404).send()
        }
        if (req.header('accept') === 'text/plain') {
            return res.status(200).send(hw.content)
        }
        return res.status(200).send(hw)
    }
    catch(err){
        console.warn(err.stack)
        res.status(500).json({message : 'server error'})
    }
})

```

module.exports = app

2021-----

#Subject 3 (2.5 pts)

#TOPIC: REST

Having the following application developed using NodeJS, complete the `GET` method on path `/ships` :

- supported query params are `page` and `pageSize`

- If no page or page size is specified, all ships are returned; (0.5 pts)
- If a page is specified, but no page size, the page size is assumed to be 5 and the nth page of 5 is returned (0.5 pts)
- If both page and page size are specified, the page-th page of the specified size is returned (0.5 pts)
- If a malformed page or page size is specified, all ships are returned; (0.5 pts)

- If the specified page is beyond the last available record, an empty array of pages is returned. (0.5 pts)

```
const express = require('express')
const bodyParser = require('body-parser')
const Sequelize = require('sequelize')

const mysql = require('mysql2/promise')

const DB_USERNAME = 'root'
const DB_PASSWORD = 'welcome12#'

let conn

mysql.createConnection({
  user : DB_USERNAME,
  password : DB_PASSWORD
})
.then((connection) => {
  conn = connection
  return connection.query('CREATE DATABASE IF NOT EXISTS tw_exam')
})
.then(() => {
  return conn.end()
})
.catch((err) => {
  console.warn(err.stack)
})

const sequelize = new Sequelize('tw_exam', DB_USERNAME, DB_PASSWORD, {
  dialect : 'mysql',
  logging: false
})

let Ship = sequelize.define('ship', {
  name : Sequelize.STRING,
  portOfSail : Sequelize.STRING,
  displacement : Sequelize.INTEGER
},{
  timestamps : false
})

const app = express()

app.get('/create', async (req, res) => {
  try{
    await sequelize.sync({force : true})
    for (let i = 0; i < 10; i++){
      let ship = new Ship({
        name : `name${i}`,
        portOfSail : `port ${i}`,
        displacement : 3000 + 10 * i
      })
      await ship.save()
    }
    res.status(201).json({message : 'created'})
  }
  catch(err){
    console.warn(err.stack)
  }
})
```

```

        res.status(500).json({message : 'server error'})
    }
})

app.get('/ships', async (req, res) => {

})

app.post('/ships', async (req, res) => {
    try{
        let ship = new Ship(req.body)
        await ship.save()
        res.status(201).json({message : 'created'})
    }
    catch(err){
        res.status(500).json({message : 'server error'})
    }
})

module.exports = app

```


 # Having the following application developed using NodeJS, complete the `POST` method on path `/students` :

- If no request body is present you should return a json with the following format: `{message: "Body is missing"}`. Response status code should be: `500`;
- If the request body properties are missing you should return a json with the following format: `{message: "Invlid body format"}`. Response status code should be: `500`;
- Student age should be positive, otherwise return a json with the following format: `{message: "Age should be a positive number"}`. Response status code should be: `500`;
- If the student already exists in the array. Return a json with the following format: `{message: "Student already exists"}`. Response status code should be: `500`. Checking is done by `name`;
- If the request body is good, student should be added in the array and return a json with the following format: `{message: "Created"}`. Response status code should be: `201`;

 # Having the following application developed using NodeJS, complete the `POST` method on path `/products` :

-----> 4/5
 <-----

- If no request body is present you should return a json with the following format: `{message: "Body is missing"}`. Response status code should be: `500`;
- If the request body properties are missing you should return a json with the following format: `{message: "Invlid body format"}`. Response status code should be: `500`;
- Product price should be positive, otherwise return a json with the following

format: `{message: "Price should be a positive number"}`. Response status code should be: `500`;

- If the product already exists in the array. Return a json with the following format: `{message: "Product already exists"}`. Response status code should be: `500`;
- If the request body is good, product should be added in the array and return a json with the following format: `{message: "Created"}`. Response status code should be: `201`;

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

```
const app = express();
```

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

```
app.locals.students = [
  {
    name: "Gigel",
    surname: "Popel",
    age: 23
  },
  {
    name: "Gigescu",
    surname: "Ionel",
    age: 25
  }
];
```

```
app.get('/students', (req, res) => {
  res.status(200).json(app.locals.products);
});
```

```
app.post('/students', (req, res) => {
  const body = req.body;
  if(Object.keys(body).length === 0) {
    res.status(500).json({message: "Body is missing"});
  }
  else if(!body.hasOwnProperty('name') || !body.hasOwnProperty('surname') || !
body.hasOwnProperty('age')) {
    res.status(500).json({message: "Invalid body format"});
  }
  //Student age should be positive, otherwise return a json with the following
format: `{message: "Age should be a positive number"}`. Response status code should
be: `500`;
  else if(body.age < 0) {
    res.status(500).json({message: "Age should be a positive number"});
  }
  // If the student already exists in the array. Return a json with the following
format: `{message: "Student already exists"}`. Response status code should be:
`500`. Checking is done by `name`;
  else if(app.locals.students.some(student => student.name === body.name)) {
    res.status(500).json({message: "Student already exists"});
  }
  //If the body is valid the student should be added to the array
  else {
    app.locals.students.push(body);
  }
});
```

```

        res.status(201).json({message: "Created"});
    }

    });
module.exports = app;

```


 # Having the following application developed using NodeJS, complete the `POST` method on path `/students` :

- If no request body is present you should return a json with the following format: `{message: "Body is missing"}`. Response status code should be: `500`;
- If the request body properties are missing you should return a json with the following format: `{message: "Invalid body format"}`. Response status code should be: `500`;
- Student age should be positive, otherwise return a json with the following format: `{message: "Age should be a positive number"}`. Response status code should be: `500`;
- If the student already exists in the array. Return a json with the following format: `{message: "Student already exists"}`. Response status code should be: `500`. Checking is done by `name`;
- If the request body is good, student should be added in the array and return a json with the following format: `{message: "Created"}`. Response status code should be: `201`;

```

const express = require('express');
const bodyParser = require('body-parser');
const cors = require('cors');

const app = express();

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

app.locals.students = [
  {
    name: "Gigel",
    surname: "Popel",
    age: 23
  },
  {
    name: "Gigescu",
    surname: "Ionel",
    age: 25
  }
];

app.get('/students', (req, res) => {
  res.status(200).json(app.locals.products);
});

app.post('/students', (req, res) => {
  if (!req.body) {

```

```

    return res.status(500).json({ message: 'Body is missing' });
  }

  const { name, age } = req.body;
  if (!name || !age) {
    return res.status(500).json({ message: 'Invalid body format' });
  }

  if (age < 0) {
    return res.status(500).json({ message: 'Age should be a positive number' });
  }

  // Check if student already exists in the array
  const students = [/* array of students */];
  const studentExists = students.some(student => student.name === name);
  if (studentExists) {
    return res.status(500).json({ message: 'Student already exists' });
  }

  // Add the student to the array
  students.push({ name, age });

  return res.status(201).json({ message: 'Created' });
});
module.exports = app;

```

Having the following application developed using NodeJS, complete the `GET` method on path `/ships` :

- supported query params are `page` and `pageSize`
- If no page or page size is specified, all ships are returned; (0.5 pts)
- If a page is specified, but no page size, the page size is assumed to be 5 and the nth page of 5 is returned (0.5 pts)
- If both page and page size are specified, the page-th page of the specified size is returned (0.5 pts)
- If a malformed page or page size is specified, all ships are returned; (0.5 pts)
- If the specified page is beyond the last available record, an empty array of pages is returned. (0.5 pts)

```

app.get('/ships', async (req, res) => {
  //1.
  if ((!req.query.pageNo && !req.query.pageSize)) {
    const ships = await Ship.findAll()
    return res.status(200).send(ships)
  }
  //2.
  if (req.query.pageNo && !req.query.pageSize) {
    const ships = await Ship.findAll({
      limit: 5,
      offset: req.query.pageNo * 5
    })
    return res.status(200).send(ships)
  }
  //3.
  if (req.query.pageNo && req.query.pageSize) {

```



```

//4.
if ((isNaN(req.query.pageNo) || isNaN(req.query.pageSize))) {
  const ships = await Ship.findAll()
  return res.status(200).send(ships)
}
//5.
const ships = await Ship.findAll({
  offset: req.query.pageNo * req.query.pageSize,
  limit: parseInt(req.query.pageSize, 10)
})
return res.status(200).send(ships)
}
})

```

 #Subject 3 (2.5 pts)
 #TOPIC: REST

Having the `app.js` file complete `POST` and `DELETE` methods on paths `/device` and `/device/:id`:

- `POST /device` returns status code 400 and response `{message: 'bad request'}` if `body` is null (0.5 pts);
- `POST /device` returns status code 400 and response `{message: 'bad request'}` if `price < 0` (0.5 pts);
- `POST /device` returns status code 400 and response `{message: 'bad request'}` if `name` contains less than 4 characters` (0.5 pts);
- `POST /device` returns status code 201 and response `{message: "device created"}` if `body` is valid` (0.5 pts);
- `DELETE /device/:id` returns status code 202 and response `{message: "device deleted"}` if `id` for a device is present in the database (0.5 pts);

```

app.post('/device', async (req, res) => {
  try {
    // Validate the request body
    if (!req.body) {
      return res.status(400).json({ message: 'bad request' });
    }
    if (req.body.price < 0) {
      return res.status(400).json({ message: 'bad request' });
    }
    if (req.body.name.length < 4) {
      return res.status(400).json({ message: 'bad request' });
    }

    // Create the device
    const device = await Device.create(req.body);
    res.status(201).json({ message: 'device created' });
  } catch (err) {
    res.status(500).json({ message: 'server error' });
  }
});

```