



المدرسة العليا  
للتكنولوجيا - الصويرة  
L'ÉCOLE SUPÉRIEURE DE  
TECHNOLOGIE – ESSAOUIRA

# Micro Projet

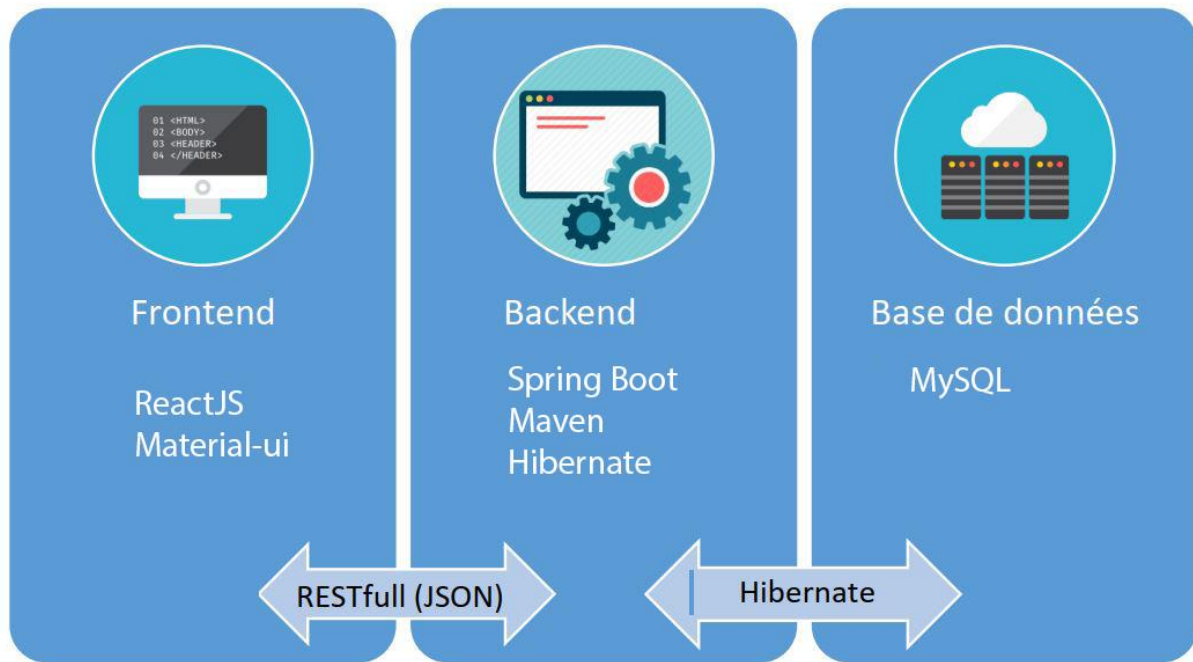
Réalisation d'un site web pour l'achat de la musique avec  
Spring Boot , Maven ,ReactJs ,Material-UI et MySQL ..

**Hmimssa Soufiane**

**2020/2021**

# Objectif :

Réalisation d'un site web pour l'achat de la musique l'architecture utilise tout au long du developpement est divise en trois parties.



# Les outils de développement utilisés :

---

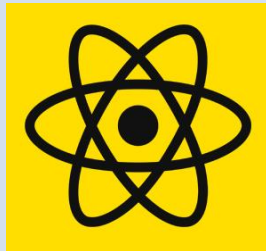
➤ Material UI :



➤ Spring Boot :



➤ ReactJS :



➤ MySql :



➤ Hibernate :

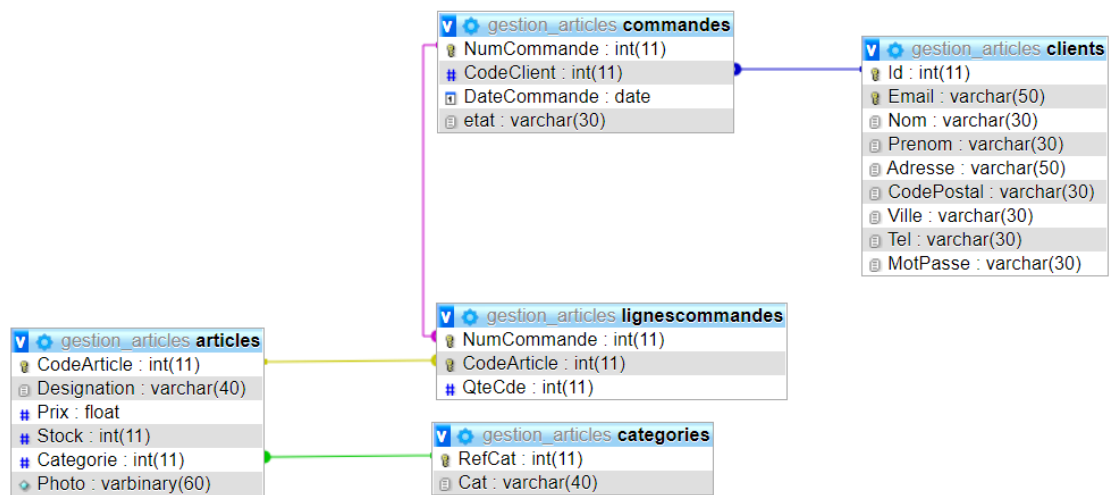


➤ Maven:

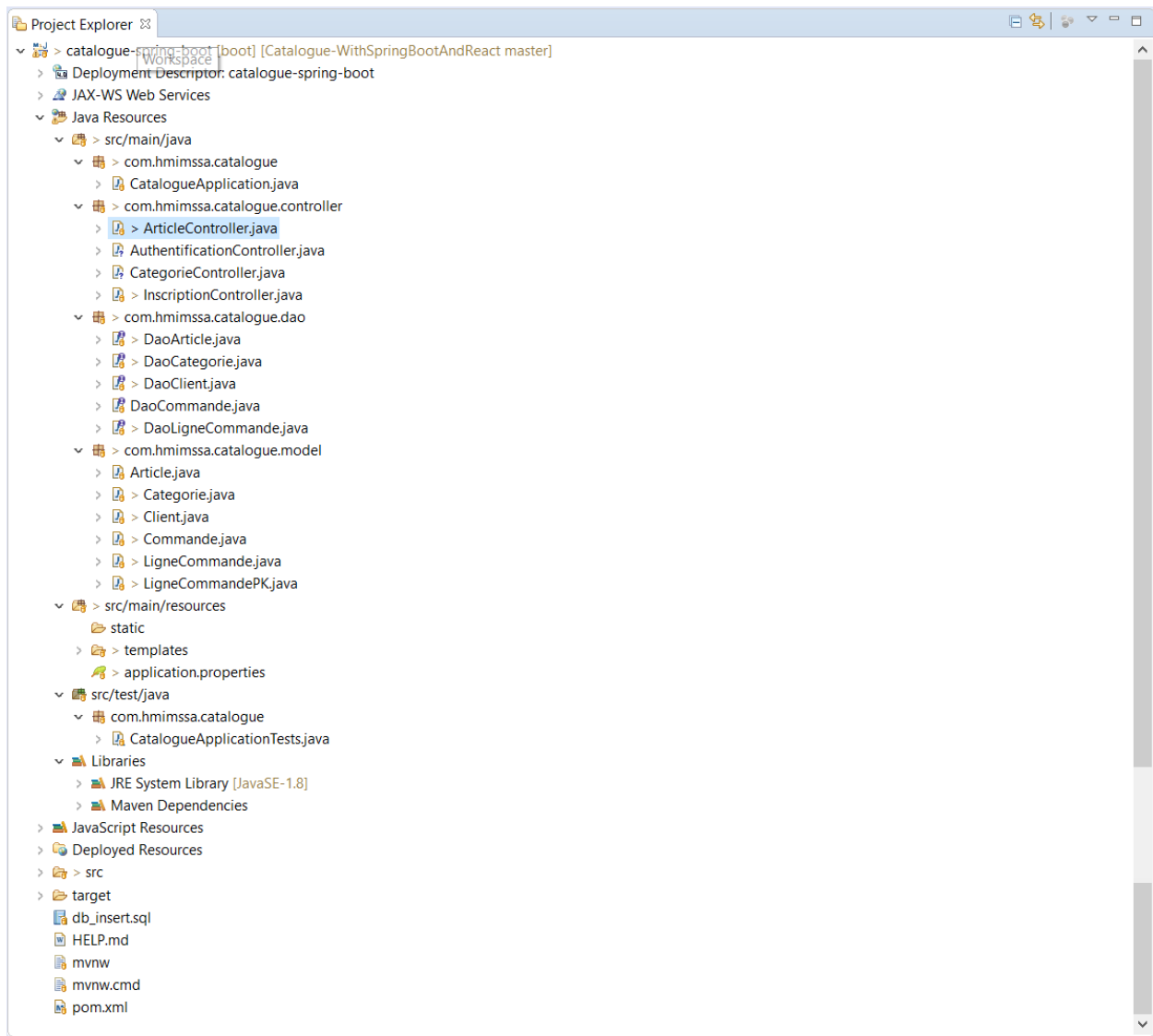


# Notre base de données

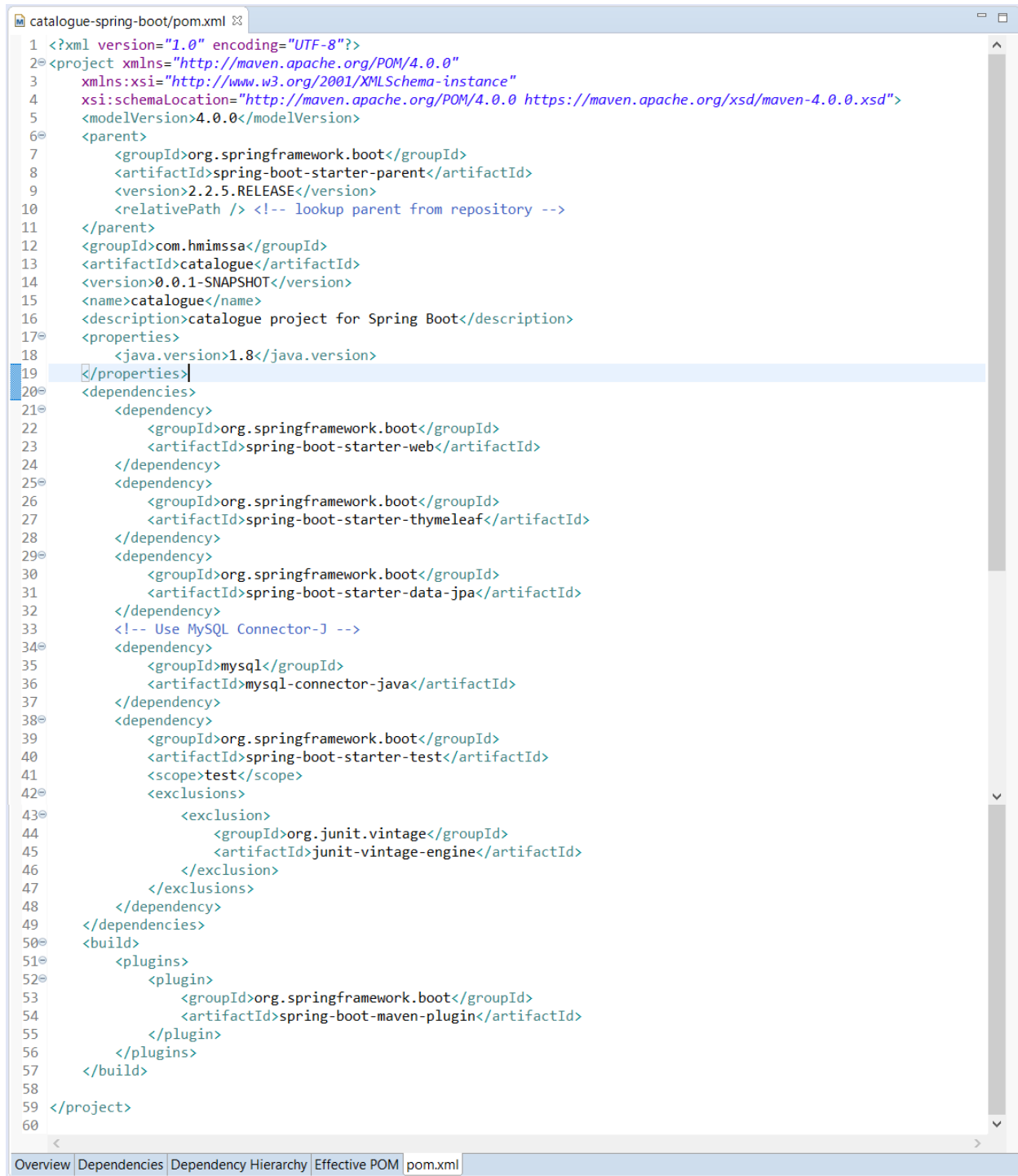
Cette base de données a été générée par **Hibernate**



# Structure de Projet Back-end



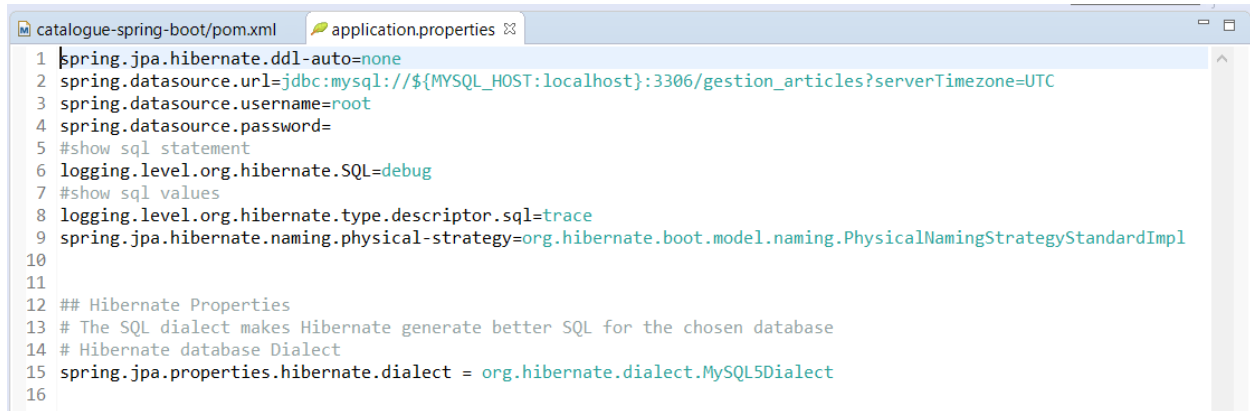
# Configuration du fichier POM.XML



```
1 <?xml version="1.0" encoding="UTF-8"?>
2 <project xmlns="http://maven.apache.org/POM/4.0.0"
3     xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
4     xsi:schemaLocation="http://maven.apache.org/POM/4.0.0 http://maven.apache.org/xsd/maven-4.0.0.xsd">
5     <modelVersion>4.0.0</modelVersion>
6     <parent>
7         <groupId>org.springframework.boot</groupId>
8         <artifactId>spring-boot-starter-parent</artifactId>
9         <version>2.2.5.RELEASE</version>
10        <relativePath /> <!-- lookup parent from repository -->
11    </parent>
12    <groupId>com.hmimssa</groupId>
13    <artifactId>catalogue</artifactId>
14    <version>0.0.1-SNAPSHOT</version>
15    <name>catalogue</name>
16    <description>catalogue project for Spring Boot</description>
17    <properties>
18        <java.version>1.8</java.version>
19    </properties>
20    <dependencies>
21        <dependency>
22            <groupId>org.springframework.boot</groupId>
23            <artifactId>spring-boot-starter-web</artifactId>
24        </dependency>
25        <dependency>
26            <groupId>org.springframework.boot</groupId>
27            <artifactId>spring-boot-starter-thymeleaf</artifactId>
28        </dependency>
29        <dependency>
30            <groupId>org.springframework.boot</groupId>
31            <artifactId>spring-boot-starter-data-jpa</artifactId>
32        </dependency>
33        <!-- Use MySQL Connector-J -->
34        <dependency>
35            <groupId>mysql</groupId>
36            <artifactId>mysql-connector-java</artifactId>
37        </dependency>
38        <dependency>
39            <groupId>org.springframework.boot</groupId>
40            <artifactId>spring-boot-starter-test</artifactId>
41            <scope>test</scope>
42            <exclusions>
43                <exclusion>
44                    <groupId>org.junit.vintage</groupId>
45                    <artifactId>junit-vintage-engine</artifactId>
46                </exclusion>
47            </exclusions>
48        </dependency>
49    </dependencies>
50    <build>
51        <plugins>
52            <plugin>
53                <groupId>org.springframework.boot</groupId>
54                <artifactId>spring-boot-maven-plugin</artifactId>
55            </plugin>
56        </plugins>
57    </build>
58 </project>
```

The screenshot shows an IDE window titled 'catalogue-spring-boot/pom.xml'. The code is a Maven POM file for a project named 'catalogue'. It inherits from 'org.springframework.boot:spring-boot-starter-parent:2.2.5.RELEASE'. The project's groupId is 'com.hmimssa' and its artifactId is 'catalogue'. It has a version of '0.0.1-SNAPSHOT'. The description is 'catalogue project for Spring Boot'. The properties section sets 'java.version' to '1.8'. The dependencies section includes 'spring-boot-starter-web', 'spring-boot-starter-thymeleaf', 'spring-boot-starter-data-jpa', 'mysql-connector-java' (commented as 'Use MySQL Connector-J'), and 'spring-boot-starter-test' with an exclusion for 'junit-vintage-engine'. The build section includes the 'spring-boot-maven-plugin'. The IDE interface at the bottom shows tabs for 'Overview', 'Dependencies', 'Dependency Hierarchy', 'Effective POM', and 'pom.xml', with 'pom.xml' currently selected.

# Configuration du fichier application.properties

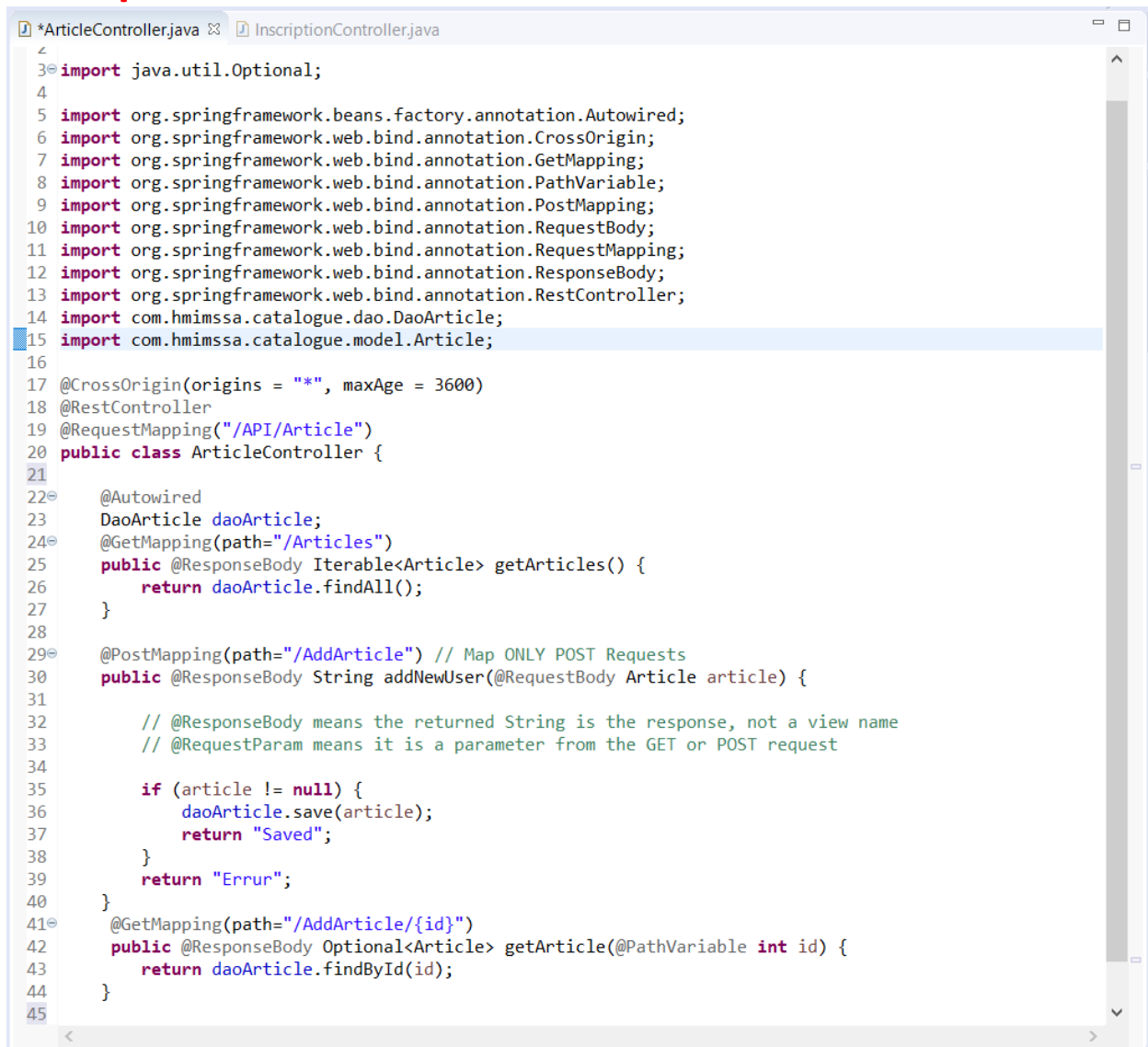
A screenshot of an IDE window with two tabs: 'catalogue-spring-boot/pom.xml' and 'application.properties'. The 'application.properties' tab is active, showing a list of configuration properties for a Spring Boot application. The properties are numbered 1 through 16 on the left margin. The code is as follows:

```
1 spring.jpa.hibernate.ddl-auto=none
2 spring.datasource.url=jdbc:mysql://${MYSQL_HOST:localhost}:3306/gestion_articles?serverTimezone=UTC
3 spring.datasource.username=root
4 spring.datasource.password=
5 #show sql statement
6 logging.level.org.hibernate.SQL=debug
7 #show sql values
8 logging.level.org.hibernate.type.descriptor.sql=trace
9 spring.jpa.hibernate.naming.physical-strategy=org.hibernate.boot.model.naming.PhysicalNamingStrategyStandardImpl
10
11
12 ## Hibernate Properties
13 # The SQL dialect makes Hibernate generate better SQL for the chosen database
14 # Hibernate database Dialect
15 spring.jpa.properties.hibernate.dialect = org.hibernate.dialect.MySQL5Dialect
16
```

# Couche Controller



## Exemple contrôleur d'Article :

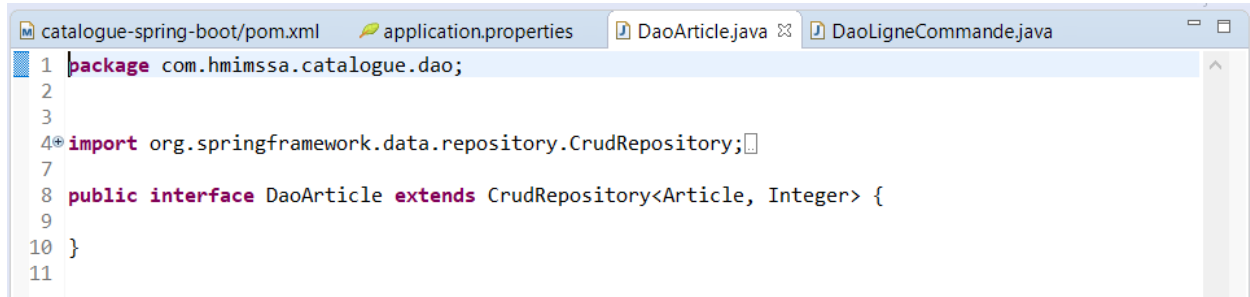




# Couche Dao



## Exemple :



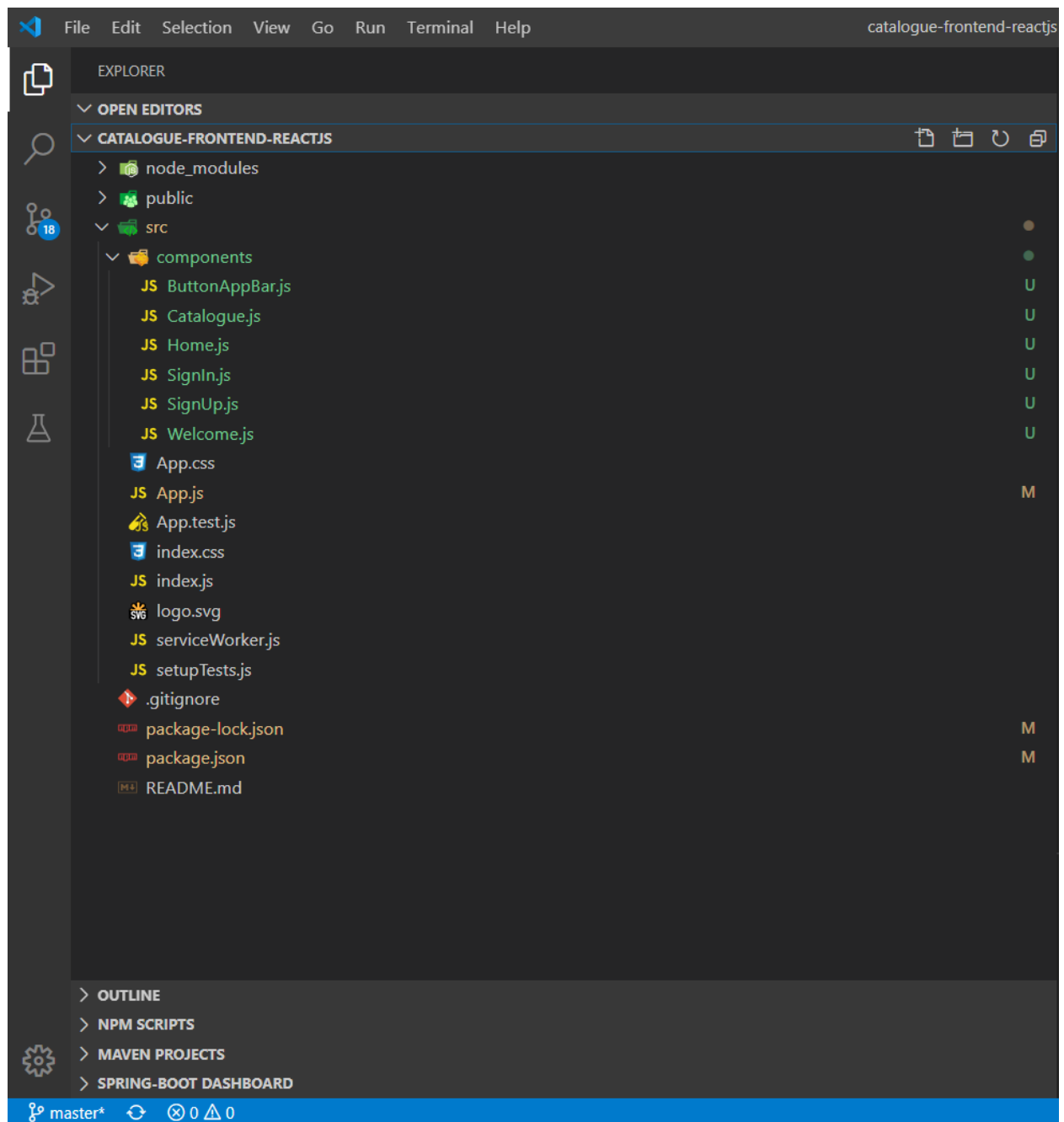
# Couche Métier



## Exemple de class commande de couche metier

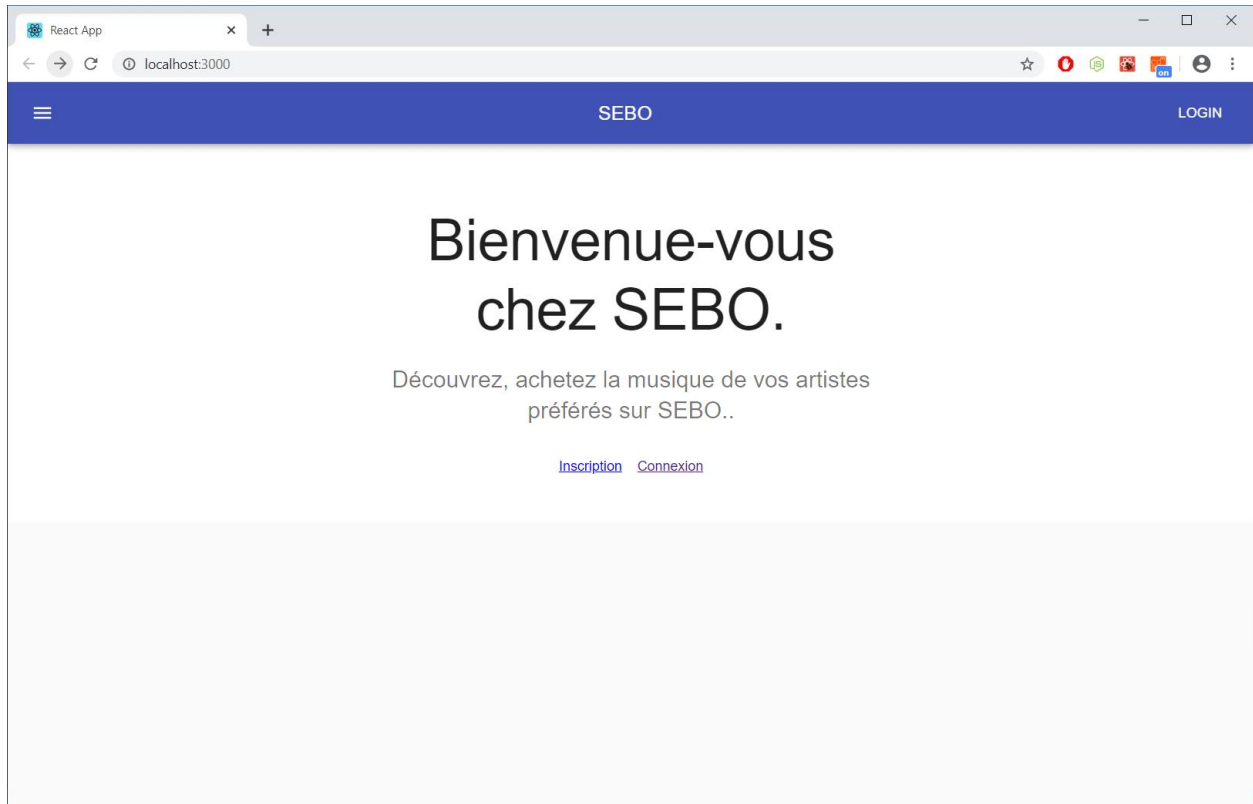
```
1 package com.hmimssa.catalogue.model;
2
3 import java.util.Date;
4
5 @Entity
6 public class Commande {
7     @Id
8     @GeneratedValue(strategy = GenerationType.IDENTITY)
9     private int numCommande;
10    private Date dateCommande;
11    private String etat;
12
13    @ManyToOne
14    @Cascade(value = { CascadeType.SAVE_UPDATE })
15    @JoinColumn(name="codeClient")
16    private Client client;
17    @OneToMany(mappedBy = "commande")
18    @Cascade(value = { CascadeType.ALL })
19    @SortNatural
20    @MapKey(name = "article")
21    private SortedMap<Article, LigneCommande> detailsCommandes = new TreeMap<>();
22
23    public Commande() {
24        super();
25    }
26
27    public Commande(int numCommande, Client client, Date dateCommande, String etat) {
28        super();
29        this.numCommande = numCommande;
30        this.client = client;
31        this.dateCommande = dateCommande;
32        this.etat = etat;
33    }
34
35    public int getNumCommande() {
36        return numCommande;
37    }
38
39    public void setNumCommande(int numCommande) {
40        this.numCommande = numCommande;
41    }
42
43    public Client getClient() {
44        return client;
45    }
46
47    public void setClient(Client client) {
48        this.client = client;
49    }
50
51    public Date getDateCommande() {
52        return dateCommande;
53    }
54
55    public void setDateCommande(Date dateCommande) {
56        this.dateCommande = dateCommande;
57    }
58
59    public String getEtat() {
60        return etat;
61    }
62
63    public void setEtat(String etat) {
64        this.etat = etat;
65    }
66 }
67
```

# Structure de Projet Front-end



## Partie User Interface :

une page simple de présentation

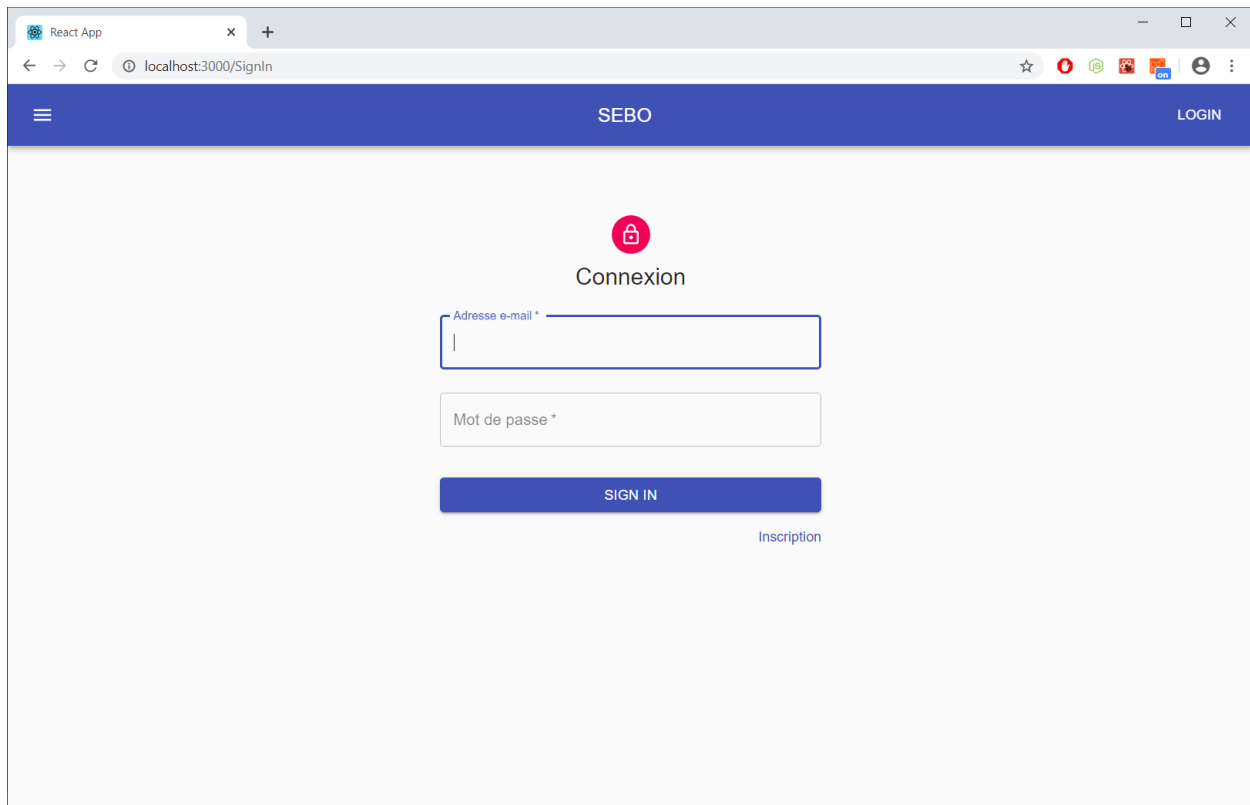


## Code :

```
JS Welcome.js
src > components > JS Welcome.js > Welcome
1 import React from 'react';
2 import CssBaseline from '@material-ui/core/CssBaseline';
3 import Grid from '@material-ui/core/Grid';
4 import Typography from '@material-ui/core/Typography';
5 import { makeStyles } from '@material-ui/core/styles';
6 import Container from '@material-ui/core/Container';
7 import { Link } from 'react-router-dom';
8 const useStyles = makeStyles(theme => ({
9   icon: {
10     marginRight: theme.spacing(2),
11   },
12   heroContent: {
13     backgroundColor: theme.palette.background.paper,
14     padding: theme.spacing(8, 0, 6),
15   },
16   heroButtons: {
17     marginTop: theme.spacing(4),
18   },
19   cardGrid: {
20     padding: theme.spacing(8),
21     padding: theme.spacing(8),
22   },
23   card: {
24     height: '100%',
25     display: 'flex',
26     flexDirection: 'column',
27   },
28   cardMedia: {
29     padding: theme.spacing(8),
30   },
31   cardContent: {
32     flex: 1,
33   },
34   footer: {
35     backgroundColor: theme.palette.background.paper,
36     padding: theme.spacing(6),
37   },
38 }));
39 export default function Welcome() {
40   const classes = useStyles();
41   return (
42     <React.Fragment>
43       <CssBaseline />
44       <main>
45         { /* Hero unit */ }
46         <div className={classes.heroContent}>
47           <Container maxWidth="sm">
48             <Typography component="h1" variant="h2" align="center" color="textPrimary" gutterBottom>
49               Bienvenue-vous chez SEBO.
50             </Typography>
51             <Typography variant="h5" align="center" color="textSecondary" paragraph>
52               Découvrez, achetez la musique de vos artistes préférés sur SEBO..
53             </Typography>
54             <div className={classes.heroButtons}>
55               <Grid container spacing={2} justify="center">
56                 <Grid item>
57                   <Link variant="contained" color="primary" to="/SignUp">Inscription</Link>
58                 </Grid>
59                 <Grid item>
60                   <Link to="/SignIn">Connexion</Link>
61                 </Grid>
62               </Grid>
63             </div>
64           </Container>
65         </div>
66       </main>
67     </React.Fragment>
68   );
69 }
70 }
```

## ➤ Page d'authentification :

Dès l'accès à l'application une page d'authentification s'affiche.  
Après authentification accéder aux différentes fonctionnalités de l'site



```
import React from 'react';
import Avatar from '@material-ui/core/Avatar';
import Button from '@material-ui/core/Button';
import CssBaseline from '@material-ui/core/CssBaseline';
import TextField from '@material-ui/core/TextField';
import Link from '@material-ui/core/Link';
import Grid from '@material-ui/core/Grid';
import LockOutlinedIcon from '@material-ui/icons/LockOutlined';
import Typography from '@material-ui/core/Typography';
import { withStyles } from '@material-ui/core/styles';
import Container from '@material-ui/core/Container';
import { Redirect } from 'react-router-dom'
```

```
const styles = theme => ({
  paper: {
    marginTop: theme.spacing(8),
    display: 'flex',
    flexDirection: 'column',
    alignItems: 'center',
  },
  avatar: {
    margin: theme.spacing(1),
    backgroundColor: theme.palette.secondary.main,
  },
  form: {
    width: '100%', // Fix IE 11 issue.
    marginTop: theme.spacing(1),
```

```

    },
    submit: { margin: theme.spacing(3, 0, 2), },
  });

class SignIn extends React.Component {
  state = {
    client: {},
    email: "",
    motPasse: "",
    redirect: false
  };
  setRedirect = () => {
    this.setState({
      redirect: true
    })
  }
  renderRedirect = () => {
    if (this.state.redirect) {
      return <Redirect to="/Catalogue" />
    }
  }
  onSubmit = (e) => {
    e.preventDefault();

    var myHeaders = new Headers();
    myHeaders.append("Content-Type", "application/json");

    var raw = JSON.stringify({ "email": this.state.email, "motPasse": this.state.motPasse });

    var requestOptions = {
      method: 'POST',
      headers: myHeaders,
      body: raw,
      redirect: 'follow'
    };

    fetch("http://localhost:8080/API/Client/signIn", requestOptions)
      .then(response => response.text())
      .then(result => {
        this.setState({ client: JSON.parse(result) });
        console.log(this.state.client);
        if (result !== "") this.setRedirect();
      })
      .catch(error => console.log('error', error));
  }

  render() {
    const classes = this.props;
    return (
      <div>
        {this.renderRedirect()}
        <Container component="main" maxWidth="sm">
          <CssBaseline />
          <div className={classes.paper}>
            <Avatar className={classes.avatar}>
              <LockOutlinedIcon />
            </Avatar>
            <Typography component="h1" variant="h5">
              Connexion
            </Typography>
            <form className={classes.form} onSubmit={this.onSubmit} noValidate>
              <TextField variant="outlined" margin="normal" required fullWidth
                id="email"
                label="Adresse e-mail"
                name="email"
                onChange={e => {
                  this.setState({ email: e.target.value });
                }}
                autoFocus
              />
            </form>
          </div>
        </Container>
      </div>
    );
  }
}

```

```

        <TextField variant="outlined" margin="normal" required fullWidth
            name="password"
            label="Mot de passe"
            type="password"
            id="password"
            onChange={e => {
                this.setState({ motPasse: e.target.value });
            }}
            autoComplete="current-password"
        />
        <Button type="submit" fullWidthvariant="contained"
            color="primary" className={classes.submit} >
            Sign In
        </Button>
        <Grid container>
            <Grid item xs>
            </Grid>
            <Grid item>
                <Link href="#" variant="body2">
                    {"Inscription"}
                </Link>
            </Grid>
        </Grid>
    </form>
</div>
</Container>
</div>
    );
}
}
export default withStyles(styles, { withTheme: true })(SignIn);

```



## ➤ Page Inscription:

The screenshot shows a web browser window with the address bar displaying 'localhost:3000/SignUp'. The page has a blue header with a menu icon on the left, the text 'SEBO' in the center, and a 'LOGIN' link on the right. Below the header, there is a sign-up form titled 'Inscription' with a red lock icon. The form contains four input fields: 'Prenom \*', 'Nom \*', 'Email \*', and 'Mot de passe \*'. Below these fields is a blue button labeled 'INSCRIPTION'.

## Code :

```
import React from 'react';
import Avatar from '@material-ui/core/Avatar';
import Button from '@material-ui/core/Button';
import CssBaseline from '@material-ui/core/CssBaseline';
import TextField from '@material-ui/core/TextField';
import Link from '@material-ui/core/Link';
import Grid from '@material-ui/core/Grid';
import LockOutlinedIcon from '@material-ui/icons/LockOutlined';
import Typography from '@material-ui/core/Typography';
import { makeStyles } from '@material-ui/core/styles';
import Container from '@material-ui/core/Container';

const useStyles = makeStyles(theme => ({
  paper: {
    marginTop: theme.spacing(8),
    display: 'flex',
    flexDirection: 'column',
    alignItems: 'center',
  },
  avatar: {
    margin: theme.spacing(1),
    backgroundColor: theme.palette.secondary.main,
  },
  form: {
    width: '100%', // Fix IE 11 issue.
    marginTop: theme.spacing(3),
  },
  submit: {
    margin: theme.spacing(3, 0, 2),
  },
}));
```

```

export default function SignUp() {
  const classes = useStyles();

  return (
    <Container component="main" maxWidth="xs">
      <CssBaseline />
      <div className={classes.paper}>
        <Avatar className={classes.avatar}>
          <LockOutlinedIcon />
        </Avatar>
        <Typography component="h1" variant="h5">
          Inscription
        </Typography>
        <form className={classes.form} noValidate>
          <Grid container spacing={2}>
            <Grid item xs={12} sm={6}>
              <TextField autoComplete="fname" name="firstName"
                variant="outlined"
                required
                fullWidth
                id="firstName"
                label="Prenom"
                autoFocus
              />
            </Grid>
            <Grid item xs={12} sm={6}>
              <TextField variant="outlined" required fullWidth
                id="lastName"
                label="Nom"
                name="lastName"
                autoComplete="lname"
              />
            </Grid>
            <Grid item xs={12}>
              <TextField variant="outlined" required fullWidth
                id="email"
                label="Email"
                name="email"
                autoComplete="email"
              />
            </Grid>
            <Grid item xs={12}>
              <TextField variant="outlined" required fullWidth
                name="password"
                label="Mot de passe"
                type="password"
                id="password"
                autoComplete="current-password"
              />
            </Grid>

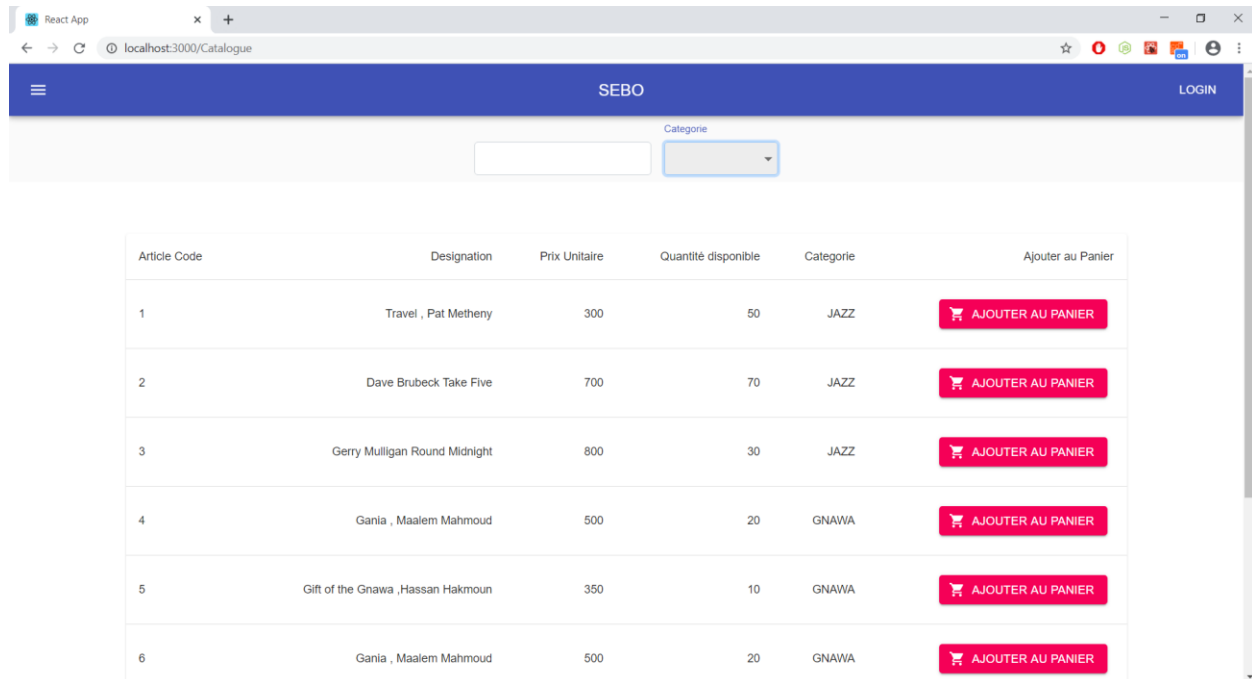
            </Grid>
            <Button type="submit" fullWidth variant="contained" color="primary"
              className={classes.submit}>
              >
              Inscription
            </Button>

          </form>
        </div>

      </Container>
    );
  }

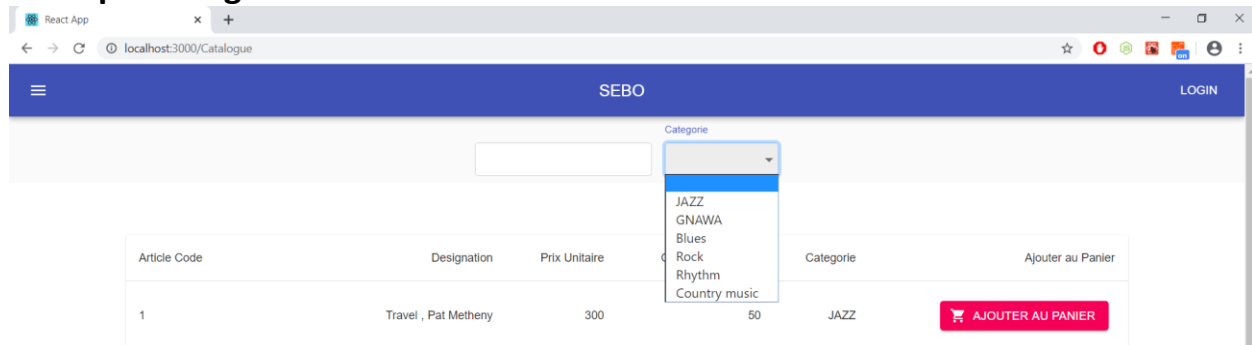
```

## ➤ Page Catalogue:



Article Code	Designation	Prix Unitaire	Quantité disponible	Categorie	Ajouter au Panier
1	Travel , Pat Metheny	300	50	JAZZ	AJOUTER AU PANIER
2	Dave Brubeck Take Five	700	70	JAZZ	AJOUTER AU PANIER
3	Gerry Mulligan Round Midnight	800	30	JAZZ	AJOUTER AU PANIER
4	Gania , Maalem Mahmoud	500	20	GNAWA	AJOUTER AU PANIER
5	Gift of the Gnawa ,Hassan Hakmoun	350	10	GNAWA	AJOUTER AU PANIER
6	Gania , Maalem Mahmoud	500	20	GNAWA	AJOUTER AU PANIER

### Filter par categorie



Article Code	Designation	Prix Unitaire	Quantité disponible	Categorie	Ajouter au Panier
1	Travel , Pat Metheny	300	50	JAZZ	AJOUTER AU PANIER

### Code :

```
import React from "react";
import CssBaseline from '@material-ui/core/CssBaseline';
import Table from '@material-ui/core/Table';
import TableBody from '@material-ui/core/TableBody';
import TableCell from '@material-ui/core/TableCell';
import TableContainer from '@material-ui/core/TableContainer';
import TableHead from '@material-ui/core/TableHead';
import TableRow from '@material-ui/core/TableRow';
import Paper from '@material-ui/core/Paper';
import Container from '@material-ui/core/Container';
import { withStyles } from '@material-ui/core/styles';
import InputBase from '@material-ui/core/InputBase';
import InputLabel from '@material-ui/core/InputLabel';
import FormControl from '@material-ui/core/FormControl';
import NativeSelect from '@material-ui/core/NativeSelect';
import Button from '@material-ui/core/Button';
import ShoppingCartIcon from '@material-ui/icons/ShoppingCart';
```

```
const styles = theme => ({
  icon: {
    marginRight: theme.spacing(2),
  },
  button: {
```

```

        margin: theme.spacing(1),
      },
      heroContent: {
        backgroundColor: theme.palette.background.paper,
        padding: theme.spacing(8, 0, 6),
      },
      margin: {
        margin: theme.spacing(1),
      },
      table: {
        minWidth: 650,
      },
      footer: {
        backgroundColor: theme.palette.background.paper,
        padding: theme.spacing(6),
      },
    },
  ));

const BootstrapInput = withStyles(theme => ({
  root: {
    'label + &': {
      marginTop: theme.spacing(3),
    },
  },
  input: {
    borderRadius: 4,
    position: 'relative',
    backgroundColor: theme.palette.background.paper,
    border: '1px solid #ced4da',
    fontSize: 16,
    padding: '10px 26px 10px 12px',
    transition: theme.transitions.create(['border-color', 'box-shadow']),
    // Use the system font instead of the default Roboto font.
    fontFamily: [
      '-apple-system',
      'BlinkMacSystemFont',
      '"Segoe UI"',
      'Roboto',
      '"Helvetica Neue"',
      'Arial',
      'sans-serif',
      '"Apple Color Emoji"',
      '"Segoe UI Emoji"',
      '"Segoe UI Symbol"',
    ].join(','),
    '&:focus': {
      borderRadius: 4,
      borderColor: '#80bdff',
      boxShadow: '0 0 0 0.2rem rgba(0,123,255,.25)',
    },
  },
}))(InputBase);

```

```

class Catalogue extends React.Component {

  state = {
    articles: [],
    categories: []
  }

  componentDidMount() {
    var requestOptions = {
      method: 'GET',
      redirect: 'follow'
    };

    fetch("http://localhost:8080/API/Article/Articles", requestOptions)
      .then(response => response.text())
      .then(result => this.setState({ articles: JSON.parse(result) }))
      .catch(error => console.log('error', error));
  }
}

```



```

                </Button>
            </TableCell>
        </TableRow>
    )}
    </TableBody>
</Table>
</TableContainer>
</Container>
</div>

</main>

    { /* End footer */}
</React.Fragment >
    );
}
}
export default withStyles(styles, { withTheme: true })(Catalogue);

```