# **CRUD ECOMMERCE**

# **Avec les HOOKS**

Créer un nouveau projet intitule frontend sous le dossier EcommerceHooks dont vous créer.

C:\>mkdir EcommerceHooks

C:\>cd EcommerceHooks

C:\ EcommerceHooks>npx create-react-app frontend

```
Run `npm audit` for details.
Success! Created frontend at D:\MERN-SOIR\EcommerceHooks\frontend
Inside that directory, you can run several commands:
 npm start
   Starts the development server.
 npm run build
   Bundles the app into static files for production.
   Starts the test runner.
 npm run eject
   Removes this tool and copies build dependencies, configuration files
   and scripts into the app directory. If you do this, you can't go back!
We suggest that you begin by typing:
 cd frontend
 npm start
Happy hacking!
D:\MERN-SOIR\EcommerceHooks>cd
```

Copier ensuite le dossier Backend qui contient les services web à utiliser

Démarrer visual studio code

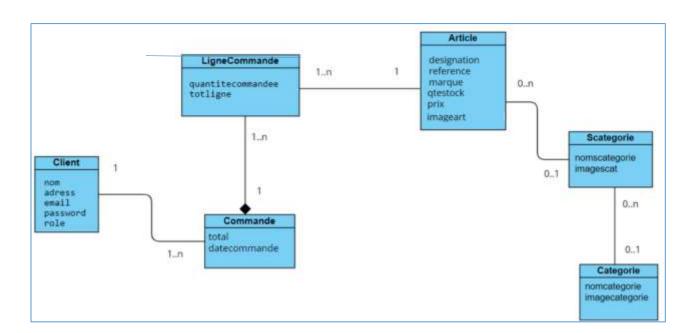
C:\EcommerceHooks\>code.

Terminal → new terminal

C:\EcommerceHooks\>cd frontend

C:\EcommerceHooks\frontend>npm start

• Un article est caractérisé par:



reference, designation, prix, marque, qtestock, imageart, categorieID

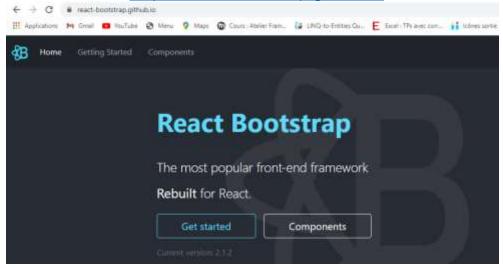
Installer axios et react-router-dom

npm i axios

npm i react-router-dom

créer l'arborescence suivante sous le dossier **src** de votre frontend:

accéder au site https://react-bootstrap.github.io



Installer bootstrap react-bootstrap

npm install react-bootstrap bootstrap

```
import 'bootstrap/dist/css/bootstrap.min.css';
```

#### Composant ProductApp

```
import React, { useState } from 'react';
import ProductList from './ProductList';
import CreateProduct from './CreateProduct';
import EditProduct from './EditProduct';
const ProductApp = () => {
  const [products, setProducts] = useState([]);
  const [editingProduct, setEditingProduct] = useState(null);
  const addProduct = (newProduct) => {
    setProducts([...products, newProduct]);
  };
  const deleteProduct = (productId) => {
    setProducts(products.filter((product) => product.id !== productId));
  };
  const updateProduct = (updatedProduct) => {
    setProducts(
      products.map((product) =>
        product.id === updatedProduct.id ? updatedProduct : product
      )
    );
    setEditingProduct(null);
  };
  return (
    <div>
      <ProductList</pre>
        products={products}
        deleteProduct={deleteProduct}
        setEditingProduct={setEditingProduct}
      />
      {editingProduct ? (
        <EditProduct
          product={editingProduct}
          updateProduct={updateProduct}
        />
      ) : (
        <CreateProduct addProduct={addProduct} />
```

• Composant ProductList

```
import React from 'react';
const ProductList = ({ products ,deleteProduct, setEditingProduct }) => {
    const handleEditClick = (product) => {
        setEditingProduct(product);
      };
  return (
    <div>
      <h2>Product List</h2>
      {products.map((product) => (
        <div key={product.id}>
          <h3>{product.name}</h3>
          {product.description}
          <button onClick={() => handleEditClick(product)}>Edit
          <button onClick={() =>
deleteProduct(product.id)}>Delete</button>
        </div>
      ))}
    </div>
  );
};
export default ProductList;
```

composant CreateProduct

```
import React, { useState } from 'react';

const CreateProduct = ({ addProduct }) => {
  const [name, setName] = useState('');
  const [description, setDescription] = useState('');

const handleSubmit = (e) => {
  e.preventDefault();
  const newProduct = {
    id: Math.random().toString(),
        name,
        description,
    };
  addProduct(newProduct);
```

```
setName('');
    setDescription('');
  };
  return (
    <div>
      <h2>Create Product</h2>
      <form onSubmit={handleSubmit}>
        <input</pre>
          type="text"
          placeholder="Name"
          value={name}
          onChange={(e) => setName(e.target.value)}
        />
        <input</pre>
          type="text"
          placeholder="Description"
          value={description}
          onChange={(e) => setDescription(e.target.value)}
        <button type="submit">Create</button>
      </form>
    </div>
  );
};
export default CreateProduct;
```

#### • composant EditProduct

```
import React, { useState } from 'react';

const EditProduct = ({ product, updateProduct }) => {
   const [name, setName] = useState(product.name);
   const [description, setDescription] = useState(product.description);

const handleSubmit = (e) => {
    e.preventDefault();
   const updatedProduct = {
        ...product,
        name,
        description,
    };
    updateProduct(updatedProduct);
};

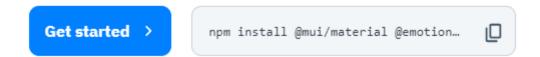
return (
   <div>
```

```
<h2>Edit Product</h2>
      <form onSubmit={handleSubmit}>
        <input</pre>
          type="text"
          value={name}
          onChange={(e) => setName(e.target.value)}
        />
        <input</pre>
          type="text"
          value={description}
          onChange={(e) => setDescription(e.target.value)}
        />
        <button type="submit">Update</button>
      </form>
    </div>
  );
};
export default EditProduct;
```

#### Material UI

# The React Ul library you always wanted

MUI provides a robust, customizable, and accessible library of foundational and advanced components, enabling you to build your design system and develop React applications faster.



installer material UI

https://webdevassist.com/reactjs-materialui/installation

#### composant ProductApp

```
import React, { useState,useEffect,useCallback } from 'react';
import axios from 'axios';
import ProductList from './ProductList';
import CreateProduct from './CreateProduct';
import EditProduct from './EditProduct';

const ProductApp = () => {
   const [products, setProducts] = useState([]);
   const [scategories, setScategories] = useState([]);
   const [editingProduct, setEditingProduct] = useState(null);
   const URL = "http://localhost:4000/api/"
```

```
try {
      const response = await axios.get(URL+"articles");
      setProducts(response.data);
    } catch (error) {
      console.error('Error fetching articles:', error);
  }, []);
  const fetchScategories= useCallback(async () => {
      try {
        const response = await axios.get(URL+"scategories");
        setScategories(response.data);
      } catch (error) {
        console.error('Error fetching articles:', error);
   }, []);
  useEffect(() => {
      fetchArticles();
      fetchScategories();
    }, [fetchArticles, fetchScategories]);
const addProduct = (newProduct) => {
  setProducts([...products, newProduct]);
};
const deleteProduct = (productId) => {
  setProducts(products.filter((product) => product._id !== productId));
};
const updateProduct = (updatedProduct) => {
  setProducts(
   products.map((product) =>
      product.id === updatedProduct. id ? updatedProduct : product
    )
  );
  setEditingProduct(null);
};
return (
  <div>
    {editingProduct ? (
      <EditProduct
        product={editingProduct}
```

#### • Composant CreateProduct

```
import React, { useState } from 'react';
import {Box,Button , TextField , MenuItem ,FormControl} from
'@mui/material';
import axios from "axios";
const CreateProduct = ({ addProduct, scategories }) => {
    const [reference, setReference] = useState("");
    const [designation, setDesignation] = useState("");
    const [prix, setPrix] = useState("");
    const [marque, setMarque] = useState("");
    const [qtestock, setQtestock] = useState("");
    const [imageart, setImageart] = useState("");
    const [scategorieID, setScategorieID] = useState("");
    const URL = "http://localhost:4000/api/articles"
    const handleSubmit = (e) => {
        e.preventDefault();
        const newProduct = {
          reference,
          designation,
          prix,
          marque,
          qtestock,
          imageart,
          scategorieID
```

```
//faire le add dans la BD
  axios.post(URL,newProduct)
  .then(res => {
  const response = res.data;
  console.log(response)
      addProduct(newProduct);
      setReference('');
      setDesignation('');
      setPrix('');
      setMarque('');
setQtestock('');
      setImageart('');
      setScategorieID('');
   })
 }
return (
   <div>
    <h2>Create Product</h2>
    <center>
    <Box style={{width:"60%"}}>
    <FormControl >
          <TextField
                        variant="outlined"
                        label="Désignation"
                        value={designation}
                        onChange={e => setDesignation(e.target.value)}
                        required />
           </FormControl>
           <FormControl >
           <TextField
                      variant="outlined"
                      label="Référence"
                      value={reference}
                      onChange={e => setReference(e.target.value)}
                      required />
           </FormControl>
           <FormControl >
           <TextField
                      variant="outlined"
                      label="Prix"
                      type="number"
                      value={prix}
```

```
onChange={e => setPrix(e.target.value)}
        />
   </FormControl>
    <FormControl >
    <TextField
              variant="outlined"
                label="Image"
                type="text"
                value={imageart}
                onChange={e => setImageart(e.target.value)}
   </FormControl>
  <FormControl >
  <TextField
            variant="outlined"
                label="Quantité Stock"
                type="number"
                value={qtestock}
                onChange={e => setQtestock(e.target.value)}
 </FormControl>
 <FormControl >
 <TextField
          fullWidth
            style={{ marginLeft: 8}}
            variant="outlined"
            label="Marque"
            value={marque}
            onChange={e => setMarque(e.target.value)}
</FormControl>
 <FormControl style={{width:350}}>
         <TextField
         select
         label="S/Catégorie"
         style={{ marginLeft: 8}}
         value={scategorieID}
         variant="outlined"
         helperText="Sélectionner une s/catégorie"
       onChange={e => setScategorieID(e.target.value)}
     scategories ?
     scategories.map((scat)=>
```

## **Cruds with backend**

### **Composant ProductApp.js**

```
import React, { useState,useEffect,useCallback } from 'react';
import axios from 'axios';
import ProductList from './ProductList';
import CreateProduct from './CreateProduct';
import EditProduct from './EditProduct';
const ProductApp = () => {
 const [products, setProducts] = useState([]);
 const [scategories, setScategories] = useState([]);
 const [editingProduct, setEditingProduct] = useState(null);
 const URL = "http://localhost:4000/api/"
  const fetchArticles = useCallback(async () => {
        const response = await axios.get(URL+"articles");
        setProducts(response.data);
      } catch (error) {
        console.error('Error fetching articles:', error);
      }
    }, []);
    const fetchScategories= useCallback(async () => {
          const response = await axios.get(URL+"scategories");
          setScategories(response.data);
        } catch (error) {
          console.error('Error fetching articles:', error);
        }
      }, []);
    useEffect(() => {
        fetchArticles();
        fetchScategories();
      }, [fetchArticles,fetchScategories]);
 const addProduct = (newProduct) => {
    setProducts([newProduct,...products]);
 };
 const deleteProduct = (productId) => {
```

```
if (
      !window.confirm("Are you sure you want to delete")
     return;
  //faire le delete dans la BD
  axios.delete(`${URL}articles/${productId}`)
   .then(res => {
       console.log(res.data);
            //faire le delete dans le tableau affiché
       setProducts(products.filter((product) => product. id !==
productId));
  })
 };
 const updateProduct = (updatedProduct) => {
    setProducts(
     products.map((product) =>
        product._id === updatedProduct._id ? updatedProduct : product
      )
    );
    setEditingProduct(null);
 };
 return (
    <div>
      {editingProduct ? (
        <EditProduct
          product={editingProduct}
          updateProduct={updateProduct}
          scategories={scategories}
        />
      ):(
        <CreateProduct addProduct={addProduct}</pre>
scategories={scategories}/>
      )}
<ProductList</pre>
        products={products}
        deleteProduct={deleteProduct}
        setEditingProduct={setEditingProduct}
      />
    </div>
```

```
);
};
export default ProductApp;
```

# composant ProductList.js

```
import React from 'react';
import Button from 'react-bootstrap/Button';
import Table from 'react-bootstrap/Table';
const ProductList = ({ products ,deleteProduct, setEditingProduct }) => {
   const handleEditClick = (product) => {
      setEditingProduct(product);
     };
 return (
   <div>
     <h2>Product List</h2>
     <center><Table striped bordered hover>
     <thead>
      Image
        Référence
        Désignation
        Marque
        Quantité Stock
        Actions
      </thead>
     {products.map((product) => (
      <img src= {product.imageart} width={100}</pre>
height={100}/>
      {product.reference}
        {product.designation}
         {product.marque}
```

#### composant CreateProduct

```
import React, { useState } from 'react';
import Button from 'react-bootstrap/Button';
import Form from 'react-bootstrap/Form';
import Col from 'react-bootstrap/Col';
import InputGroup from 'react-bootstrap/InputGroup';
import Row from 'react-bootstrap/Row';
import axios from "axios";
const CreateProduct = ({ addProduct, scategories }) => {
    const [reference, setReference] = useState("");
    const [designation, setDesignation] = useState("");
    const [prix, setPrix] = useState("");
    const [marque, setMarque] = useState("");
    const [qtestock, setQtestock] = useState("");
    const [imageart, setImageart] = useState("");
    const [scategorieID, setScategorieID] = useState("");
    const URL = "http://localhost:4000/api/articles"
    const handleSubmit = (e) => {
        e.preventDefault();
        const newProduct = {
          reference,
          designation,
          prix,
          marque,
          gtestock,
          imageart,
          scategorieID
```

```
};
  //faire le add dans la BD
  axios.post(URL,newProduct)
  .then(res => {
  const response = res.data;
      addProduct(newProduct);
      setReference('');
      setDesignation('');
      setPrix('');
      setMarque('');
      setQtestock('');
     setImageart('');
      setScategorieID('');
   })
  }
return (
    <div>
    <h2>Create Product</h2>
    <center>
    <div className="container w-100 d-flex justify-content-center">
            <div>
            <div className='form mt-3'>
          <Row className="mb-2">
            <Form.Group as={Col} md="6" >
              <Form.Label >Référence *</form.Label>
              <Form.Control</pre>
                required
                type="text"
                placeholder="Référence"
                value={reference}
                onChange={(e)=>setReference(e.target.value)}
           <Form.Control.Feedback type="invalid">
                  Saisir Référence Article
            </Form.Control.Feedback>
            </Form.Group>
            <Form.Group as={Col} md="6">
```

```
<Form.Label>Désignation *</form.Label>
      <Form.Control</pre>
        required
        type="text"
        placeholder="Désignation"
       value={designation}
       onChange={(e)=>setDesignation(e.target.value)}
      <Form.Control.Feedback type="invalid">
          Saisir Désignation
    </Form.Control.Feedback>
    </Form.Group>
    </Row>
    <Row className="mb-2">
    <Form.Group className="col-md-6">
  <Form.Label>Marque *</form.Label>
  <InputGroup hasValidation>
  <Form.Control</pre>
    type="text"
    required
    placeholder="Marque"
    value={marque}
    onChange={(e)=>setMarque(e.target.value)}
  />
  <Form.Control.Feedback type="invalid">
          Marque Incorrecte
    </Form.Control.Feedback>
    </InputGroup>
</Form.Group>
    <Form.Group as={Col} md="6">
      <Form.Label>Prix</Form.Label>
        <Form.Control</pre>
          type="number"
          placeholder="Prix"
          value={prix}
          onChange={(e)=>setPrix(e.target.value)}
        />
    </Form.Group>
  </Row>
  <Row className="mb-3">
    <Form.Group className="col-md-6">
  <Form.Label>
    Qté stock<span className="req-tag">*</span>
  </Form.Label>
  <Form.Control</pre>
```

```
required
              type="number"
              value={qtestock}
              onChange={(e)=>setQtestock(e.target.value)}
              placeholder="Qté stock"
            />
            <Form.Control.Feedback type="invalid">
              Oté stock Incorrect
            </Form.Control.Feedback>
          </Form.Group>
          <Form.Group as={Col} md="6">
                <Form.Label>Image/Form.Label>
                <Form.Control</pre>
                  type="text"
                  placeholder="Image"
                 value={imageart}
                 onChange={(e)=>setImageart(e.target.value)}
                />
              </Form.Group>
              <Form.Group as={Col} md="12">
              <Form.Label>S/Catégorie/Form.Label>
            <Form.Control</pre>
              as="select"
              type="select"
              value={scategorieID}
              onChange={(e)=>setScategorieID(e.target.value)}
        <option></option>
              {scategories.map((scat)=><option key={scat._id}
value={scat. id}>{scat.nomscategorie}</option>)}
            </Form.Control>
          </Form.Group>
           </Row>
          </div>
          <div>
         <Button variant="success"</pre>
onClick={(event)=>handleSubmit(event)}>Enregistrer</Button>
          </div>
```

#### composant EditProduct

```
import React, { useState } from 'react';
import Button from 'react-bootstrap/Button';
import Form from 'react-bootstrap/Form';
import Col from 'react-bootstrap/Col';
import InputGroup from 'react-bootstrap/InputGroup';
import Row from 'react-bootstrap/Row';
import axios from 'axios';
const EditProduct = ({ product, updateProduct, scategories }) => {
 const [reference, setReference] = useState(product.reference);
 const [designation, setDesignation] = useState(product.designation);
 const [prix, setPrix] = useState(product.prix);
 const [marque, setMarque] = useState(product.marque);
 const [qtestock, setQtestock] = useState(product.qtestock);
 const [imageart, setImageart] = useState(product.imageart);
 const [scategorieID, setScategorieID] = useState(product.scategorieID);
 const URL = "http://localhost:4000/api/"
 const handleSubmit = (e) => {
    e.preventDefault();
    const updatedProduct = {
      ...product,
      reference,
          designation,
         prix,
         marque,
          atestock,
          imageart,
          scategorieID
    };
    //update dans la BD
    axios.put(URL + 'articles/' + product. id, updatedProduct)
     .then(res => {
       console.log(res.data);
```

```
//update dans le tableau affiché
     updateProduct(updatedProduct);
      //vider le form
    // setId('')
  setReference('');
  setDesignation('');
  setPrix('');
  setMarque('');
  setQtestock('');
  setImageart('');
  setScategorieID('');
   }) .catch(error=>{
    console.log(error)
   alert("Erreur ! Modification non effectuée")
   })
  }
return (
  <div>
    <h2>Edit Product</h2>
    <center>
    <div className="container w-100 d-flex justify-content-center">
            <div>
            <div className='form mt-3'>
          <Row className="mb-2">
            <Form.Group as={Col} md="6" >
              <Form.Label >Référence *</form.Label>
              <Form.Control</pre>
                required
                type="text"
                placeholder="Référence"
                value={reference}
                onChange={(e)=>setReference(e.target.value)}
              />
           <Form.Control.Feedback type="invalid">
                  Saisir Référence Article
            </Form.Control.Feedback>
            </Form.Group>
            <Form.Group as={Col} md="6">
              <Form.Label>Désignation */Form.Label>
```

```
<Form.Control</pre>
        required
        type="text"
        placeholder="Désignation"
       value={designation}
       onChange={(e)=>setDesignation(e.target.value)}
      />
      <Form.Control.Feedback type="invalid">
          Saisir Désignation
    </Form.Control.Feedback>
    </Form.Group>
    </Row>
    <Row className="mb-2">
    <Form.Group className="col-md-6">
  <Form.Label>Marque *</form.Label>
  <InputGroup hasValidation>
  <Form.Control</pre>
    type="text"
    required
    placeholder="Marque"
    value={marque}
    onChange={(e)=>setMarque(e.target.value)}
  <Form.Control.Feedback type="invalid">
          Marque Incorrecte
    </Form.Control.Feedback>
    </InputGroup>
</Form.Group>
    <Form.Group as={Col} md="6">
      <Form.Label>Prix</Form.Label>
        <Form.Control</pre>
          type="number"
          placeholder="Prix"
          value={prix}
          onChange={(e)=>setPrix(e.target.value)}
        />
    </Form.Group>
  </Row>
  <Row className="mb-3">
    <Form.Group className="col-md-6">
  <Form.Label>
    Qté stock<span className="req-tag">*</span>
  </Form.Label>
  <Form.Control</pre>
    required
```

```
type="number"
              value={qtestock}
              onChange={(e)=>setQtestock(e.target.value)}
              placeholder="Qté stock"
            />
            <Form.Control.Feedback type="invalid">
              Qté stock Incorrect
            </Form.Control.Feedback>
          </Form.Group>
          <Form.Group as={Col} md="6">
                <Form.Label>Image</Form.Label>
                <Form.Control
                  type="text"
                  placeholder="Image"
                 value={imageart}
                 onChange={(e)=>setImageart(e.target.value)}
                />
              </Form.Group>
              <Form.Group as={Col} md="12">
              <Form.Label>S/Catégorie/Form.Label>
            <Form.Control
              as="select"
              type="select"
              value={scategorieID}
              onChange={(e)=>setScategorieID(e.target.value)}
        <option></option>
              {scategories.map((scat)=><option key={scat._id}
value={scat._id}>{scat.nomscategorie}</option>)}
            </Form.Control>
          </Form.Group>
           </Row>
          </div>
          <div>
         <Button variant="success"</pre>
onClick={(event)=>handleSubmit(event)}>Modifier</Button>
          </div>
          </div>
```