

# Redux Toolkit Panier

**Référence :** <https://react-redux.js.org/>

**Dépendances :**

```
npm install axios  
  
npm install react-router-dom  
  
npm install react-redux @reduxjs/toolkit  
  
npm i bootstrap react-bootstrap  
  
npm i react-toastify  
  
npm install @mui/material @emotion/react @emotion/styled
```

**Remarque :** Ajouter l'option **--force** en cas ou l'installation échoue

Ajouter l'appel à bootstrap dans le fichier **index.js**

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

Fichier **src/Axios/Api.js**

```
import axios from 'axios'  
  
export default axios.create({  
  baseURL: "https://ecommercebackend2023j.vercel.app/api"  
})
```

Création de services Frontend

Fichier **src/services/ArticleService.js**

```
import Api from "../Axios/Api";
```

```

const ARTICLE_API="/articles"
export const fetchArticles=async()=> {
return await Api.get(ARTICLE_API);
}
export const fetchArticleById=async(articleId)=> {
return await Api.get(ARTICLE_API + '/' + articleId);
}
export const deleteArticle=async(articleId) =>{
return await Api.delete(ARTICLE_API + '/' + articleId);
}
export const addArticle=async(article)=> {
return await Api.post(ARTICLE_API, article);
}
export const editArticle=(article) =>{
return Api.put(ARTICLE_API + '/' + article._id, article);
}

```

## CategoryService.js

```

import Api from "../Axios/Api";
const CATEGORIE_API="/categories"
export const fetchCategories=async()=> {
return await Api.get(CATEGORIE_API);
}
export const fetchCategorieById=async(categorieId)=> {
return await Api.get(CATEGORIE_API + '/' + categorieId);
}
export const deleteCategorie=async(categorieId) =>{
return await Api.delete(CATEGORIE_API + '/' + categorieId);
}
export const addCategorie=async(categorie)=> {
return await Api.post(CATEGORIE_API,categorie);
}
export const editCategorie=(categorie) =>{
return Api.put(CATEGORIE_API + '/' + categorie._id, categorie);
}

```

## ScategorieService.js

```

import Api from "../Axios/Api";
const SCATEGORIE_API="/scategories"
export const fetchSCategories=async()=> {
return await Api.get(SCATEGORIE_API);
}
export const fetchSCategorieById=async(scategorieId)=> {
return await Api.get(SCATEGORIE_API + '/' + scategorieId);
}

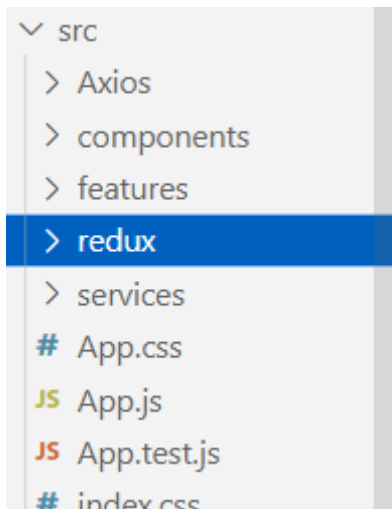
```

```

const fetchSCategorieByCat=(idcat) =>{return Api.get(SCATEGORIE_API + '/cat/' +
idcat);
}
export const deleteSCategorie=async(scategorieId) =>{
return await Api.delete(SCATEGORIE_API + '/' + scategorieId);
}
export const addSCategorie=async(scategorie)=> {
return await Api.post(SCATEGORIE_API,scategorie);
}
export const editSCategorie=(scategorie) =>{
return Api.put(SCATEGORIE_API + '/' + scategorie._id, scategorie);
}

```

Ajouter les dossiers features et redux comme indiqué ci-dessous



Créer les slices (Redux toolkit)

*Pour chaque classe on crée les slices des Cruds*

Fichier **src/features/articleSlice.js**

```

import { createSlice,createAsyncThunk } from '@reduxjs/toolkit'
import {fetchArticles,addArticle,deleteArticle,editArticle,fetchArticleById} from
"../services/ArticleService"

export const getArticles = createAsyncThunk(
  "article/getArticles",
  async (_, thunkAPI) => {
    const { rejectWithValue } = thunkAPI;
    try {
      const res = await fetchArticles();

```

```

        return res.data;
    }
    catch (error) {
        return rejectWithValue(error.message);
    }
}
);

export const createArticle = createAsyncThunk(
    "article/createArticle",
    async (article, thunkAPI) => {
        const { rejectWithValue } = thunkAPI;
        try{
            const res= await addArticle(article);
            return res.data
        }
        catch (error) {
            return rejectWithValue(error.message);
        }
    }
);

export const delArticle = createAsyncThunk(
    "article/delArticle",
    async (id,thunkAPI) => {
        const { rejectWithValue } = thunkAPI;
        try{
            await deleteArticle(id);
            return id ;
        }
        catch (error) {
            return rejectWithValue(error.message);
        }
    });

export const updateArticle = createAsyncThunk(
    "article/updateArticle",
    async (article, thunkAPI) => {
        const { rejectWithValue } = thunkAPI;
        try{
            const res= await editArticle(article);
            return res.data
        }
        catch (error) {
            return rejectWithValue(error.message);
        }
    }
);

```

```

    );

    export const findArticleById = createAsyncThunk(
      "article/findArticleById",
      async (id, thunkAPI) => {
        const { rejectWithValue } = thunkAPI;
        try{
          const res = await fetchArticleById(id);
          return res.data;
        }
        catch (error) {
          return rejectWithValue(error.message);
        }
      });

    export const articleSlice = createSlice({
      name: 'article',
      initialState:{
        articles:[],
        article:{},
        isLoading: false,
        success:null,
        error:null,
      },

      extraReducers: (builder) => {
        //get articles
        builder
          .addCase(getArticles.pending, (state, action) => {

            state.isLoading=true;
            state.error=null;
          })
          .addCase(getArticles.fulfilled, (state, action) => {
            state.isLoading=false;
            state.error = null;
            state.articles=action.payload;
          })
          .addCase(getArticles.rejected, (state, action) => {
            state.isLoading=false;
            state.error=action.payload;
            console.log("impossible de se connecter au serveur")
          })

        //insertion article
        .addCase(createArticle.pending, (state, action) => {
          state.isLoading=true;
          state.error=null;
          state.success=null;

```

```

    })
    .addCase(createArticle.fulfilled, (state, action) => {

        state.articles.push(action.payload);
        state.isLoading=false;
        state.error=null;
        state.success=action.payload;
    })
    .addCase(createArticle.rejected, (state, action) => {
        state.isLoading=false;
        state.error=action.payload;
        state.success=null;
    })
    //Modification article
    .addCase(updateArticle.pending, (state, action) => {
        state.isLoading=true;
        state.error=null;
        state.success=null;
    })
    .addCase(updateArticle.fulfilled, (state, action) => {
        state.articles = state.articles.map((item) =>
            item._id === action.payload._id ? action.payload : item
        );
        state.isLoading=false;
        state.error=null;
        state.success=action.payload;
    })
    //Delete article
    .addCase(delArticle.pending, (state, action) => {
        state.isLoading=true;
        state.error=null;
    })
    .addCase(delArticle.fulfilled, (state, action) => {
        state.isLoading=false;
        state.error=null;
        state.articles=state.articles.filter((item)=> item._id!==action.payload)

    })
    .addCase(delArticle.rejected, (state, action) => {
        state.isLoading=false;
        state.error=action.payload;
    })
    //Fectch article
    .addCase(findArticleByID.pending, (state, action) => {
        state.isLoading = true
        state.error=null;

    })
    .addCase(

```

```

        findArticleByID.fulfilled,(state, action) => {
            state.isLoading = false
            state.error = null
            state.article=action.payload;
        })
    }
}
)

export default articleSlice.reducer;

```

## Fichier `src/features/scategorieSlice.js`

```

import { createSlice,createAsyncThunk } from '@reduxjs/toolkit'
import
{fetchSCategories,addSCategorie,deleteSCategorie,editSCategorie,fetchSCategorieById
} from "../../services/ScategorieService"

export const getScategories = createAsyncThunk(
    "scategorie/getScategories",
    async (_, thunkAPI) => {
        const { rejectWithValue } = thunkAPI;
        try {
            const res = await fetchSCategories();
            return res.data;
        }
        catch (error) {
            return rejectWithValue(error.message);
        }
    }
);

export const createScategorie = createAsyncThunk(
    "scategorie/createScategorie",
    async (scategorie, thunkAPI) => {
        const { rejectWithValue } = thunkAPI;
        try{
            const res= await addSCategorie(scategorie);
            return res.data
        }
        catch (error) {
            return rejectWithValue(error.message);
        }
    }
);

```

```

    }
  }
);

export const deleteScategorie = createAsyncThunk(
  "scategorie/deleteScategorie",
  async (id, thunkAPI) => {
    const { rejectWithValue } = thunkAPI;
    try{
      await deleteScategorie(id);
      return id ;
    }
    catch (error) {
      return rejectWithValue(error.message);
    }
  });

export const updateScategorie = createAsyncThunk(
  "scategorie/updateScategorie",
  async (scategorie, thunkAPI) => {
    const { rejectWithValue } = thunkAPI;
    try{
      const res= await editScategorie(scategorie);
      return res.data
    }
    catch (error) {
      return rejectWithValue(error.message);
    }
  }
);

export const findScategorieByID = createAsyncThunk(
  "scategorie/findScategorieByID",
  async (id,thunkAPI) => {
    const { rejectWithValue } = thunkAPI;
    try{
      const res = await fetchScategorieById(id);
      return res.data;
    }
    catch (error) {
      return rejectWithValue(error.message);
    }
  });

export const scategorieSlice = createSlice({
  name: 'scategorie',
  initialState:{
    scategories:[],

```



```

    categorie:{},
    isLoading: false,
    success:null,
    error:null,
  },

  extraReducers: (builder) => {
    //get scategories
    builder
      .addCase(getScategories.pending, (state, action) => {

        state.isLoading=true;
        state.error=null;
      })
      .addCase(getScategories.fulfilled, (state, action) => {
        state.isLoading=false;
        state.error = null;
        state.scategories=action.payload;
      })
      .addCase(getScategories.rejected, (state, action) => {
        state.isLoading=false;
        state.error=action.payload;
        console.log("impossible de se connecter au serveur")
      })

    //insertion categorie
    .addCase(createScategorie.pending, (state, action) => {
      state.isLoading=true;
      state.error=null;
      state.success=null;
    })
    .addCase(createScategorie.fulfilled, (state, action) => {

      state.scategories.push(action.payload);
      state.isLoading=false;
      state.error=null;
      state.success=action.payload;
    })
    .addCase(createScategorie.rejected, (state, action) => {
      state.isLoading=false;
      state.error=action.payload;
      state.success=null;
    })
    //Modification categorie
    .addCase(updateScategorie.pending, (state, action) => {
      state.isLoading=true;
      state.error=null;
      state.success=null;
    })
  }
}

```

```

    })
    .addCase(updateScategorie.fulfilled, (state, action) => {
      state.scategories = state.scategories.map((item) =>
        item._id === action.payload._id ? action.payload : item
      );
      state.isLoading=false;
      state.error=null;
      state.success=action.payload;
    })
    //Delete scategorie
    .addCase(deleteScategorie.pending, (state, action) => {
      state.isLoading=true;
      state.error=null;
    })
    .addCase(deleteScategorie.fulfilled, (state, action) => {
      state.isLoading=false;
      state.error=null;
      state.scategories=state.scategories.filter((item)=>
item._id!==action.payload)

    })
    .addCase(deleteScategorie.rejected, (state, action) => {
      state.isLoading=false;
      state.error=action.payload;
    })
    //Fectch scategorie
    .addCase(findScategorieByID.pending, (state, action) => {
      state.isLoading = true
      state.error=null;

    })
    .addCase(
      findScategorieByID.fulfilled,(state, action) => {
        state.isLoading = false
        state.error = null
        state.scategorie=action.payload;
      })
  }

}

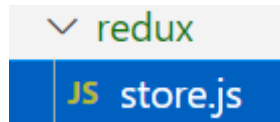
)

export default scategorieSlice.reducer;

```

## Créer le dossier redux sous src

Créer le **Fichier** `src/redux/store.js`



```
import { configureStore } from '@reduxjs/toolkit'
import articlesReducer from "../features/articleSlice"
import scategoriesReducer from "../features/scategorieSlice"

const store = configureStore({
  reducer: {
    storearticles:articlesReducer,
    storescategories: scategoriesReducer,
  }
})
export default store
```

## Importer le store dans le fichier index.js

**Fichier** `src/index.js`

```
import React from 'react';
import ReactDOM from 'react-dom/client';
import './index.css';
import App from './App';
import 'bootstrap/dist/css/bootstrap.min.css';
import reportWebVitals from './reportWebVitals';
import store from './redux/store';
import { Provider } from 'react-redux' ;

const root = ReactDOM.createRoot(document.getElementById('root'));
root.render(
  <React.StrictMode>
    <Provider store={store}>

      <App />

    </Provider>
  </React.StrictMode>
);
```

```
// If you want to start measuring performance in your app, pass a function
// to log results (for example: reportWebVitals(console.log))
// or send to an analytics endpoint. Learn more: https://bit.ly/CRA-vitals
reportWebVitals();
```

## Gestion des composants Articles

### Fichier `src/components/articlesRedux/Listarticles.js`

```
import React, { useEffect,useCallback } from "react";
import { useDispatch } from "react-redux";
import {getArticles} from "../../features/articleSlice";
import AfficheArticles from "../AfficheArticles";

const Listarticles = () => {

  const dispatch = useDispatch();

  const initFetch = useCallback(() => {
    dispatch(getArticles());
  }, [dispatch])

  useEffect(() => {
    initFetch()
  }, [initFetch])

  return (
    <div>
      <AfficheArticles/>
    </div>
  )
}

export default Listarticles
```

### ***Installer react-loading***

Site : <https://www.npmjs.com/package/react-loading>

```
npm i react-loading --force
```

## Fichier `src/components/articlesRedux/AfficheArticles.js`

```
import React from 'react'
import Card from '@mui/material/Card';
import CardActions from '@mui/material/CardActions';
import CardContent from '@mui/material/CardContent';
import CardMedia from '@mui/material/CardMedia';
import Button from '@mui/material/Button';
import Typography from '@mui/material/Typography';
import ReactLoading from 'react-loading';
import {useSelector} from "react-redux"

const AfficheArticles = () => {

  const {articles,isLoading,error} = useSelector((state)=>state.storearticles);

const renderArticles = () => {
  if (isLoading) return <center><ReactLoading type='spokes' color="red"
height={'8%'} width={'8%'} /></center>
  if (error) return <p>Impossible d'afficher la liste des articles...</p>

  return <React.Fragment>

    {articles &&
      <div
style={{display:"flex","flexWrap":"wrap","justifyContent":"left"}}>
        {articles.map((art,ind)=>{
          return <Card sx={{ maxWidth: 'auto',margin: 1 }} key={ind}>
            <CardMedia
              component="img"
              alt="image"
              height="160"
              image={art.imageart}
            />
            <CardContent>s
              <Typography gutterBottom variant="h6" component="div">
                {art.reference}
              </Typography>
              <Typography variant="body2" color="text.secondary">
                Prix : {art.prix} DT
              </Typography>
            </CardContent>
            <CardActions>
              <Button disabled={art.qtestock<=1}
                variant="contained" color="secondary" size="large"

```

```

        >
        {art.qtestock<=1? "OUT OF SOLD": "Add to cart"}
    </Button>

    </CardActions>
  </Card>

  }</div>
}
</React.Fragment>
}

return (
  <div className="container">
    {renderArticles()}
  </div>
)
}

export default AfficheArticles

```

## Fichier src/App.js

```
import Listarticles from './components/articlesRedux/Listarticles';
```

...

```
<Route path="/" element={<Listarticles/>}/>
```

