

# EX11 - Redux toolkit

לאחר שיש לנו הבנת בסיס על REDUX נעבוד עם REDUX TOOLKIT שנותן לנו יותר כלים לעבודה, פונקציות מובנות ומאחד לנו את הכלים, וזו גם ההמלצה הרשמית לעבודה עם REDUX

מתוך האתר הרשמי של REDUX

**Redux Toolkit** is our official recommended approach for writing Redux logic. It wraps around the Redux core, and contains packages and functions that we think are essential for building a Redux app. Redux Toolkit builds in our suggested best practices, simplifies most Redux tasks, prevents common mistakes, and makes it easier to write Redux applications.

ההתקנה הנדרשת

```
npm install @reduxjs/toolkit
```

```
npm install react-redux
```

יצירת הSTORE

rtk\src\app\store.js

```
import {configureStore} from "@reduxjs/toolkit"
import counterReducer from "../features/couter/counterSlice"

const store = configureStore({
  reducer:{
    counter: counterReducer
  }
})
export default store
```

rtk\src\features\couter\counterSlice.js

```
import {createSlice} from "@reduxjs/toolkit"

const counterInitState = {
  count: 0
}

const counterSlice = createSlice({
  name:"counter",
  initialState: counterInitState,
  reducers: {
    addOne: (state) =>{
      state.count +=1
    },
    minusOne: (state)=>{
      state.count -=1
    },
    reset: (state) =>{
      state.count = 0
    },
    addValue: (state, action)=>{
      state.count += Number( action.payload)
    }
  }
})

export const {addOne, minusOne , reset, addValue} =
counterSlice.actions
export default counterSlice.reducer
```

## הגדרת ה-PROVIDER

\rtk\src\index.js

```
import React from 'react';
import ReactDOM from 'react-dom/client';
import App from './App';
import {Provider} from "react-redux"
import store from './app/store';

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

## הטמעה בקומפוננטה

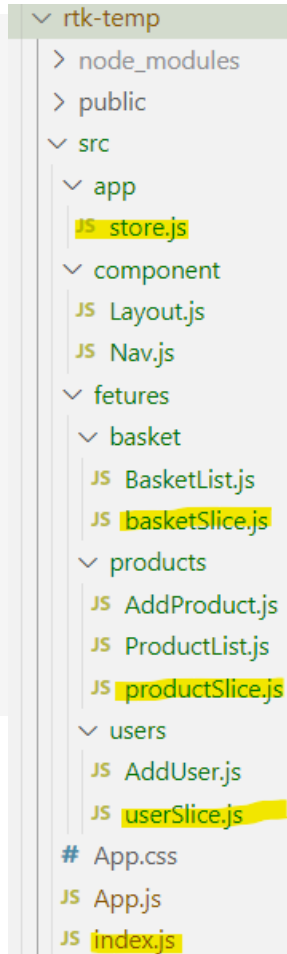
```
import { useSelector, useDispatch } from "react-redux"
import { addOne, minusOne, reset, addValue } from
"./counterSlice"
import {useState} from "react"

const Counter = () => {
  const [val, setVal] = useState(0)
  const {count} = useSelector((state)=>state.counter)
  const dispatch = useDispatch()
  return (
    <>
    <input onChange={ (e)=>setVal(e.target.value)} />
    <h1>Counter: {count}</h1>
    <button onClick={ ()=> dispatch(addOne()) }>+</button>
    <button onClick={ ()=> dispatch(minusOne()) }>-</button>
    <button onClick={ ()=> dispatch(reset()) }>reset</button>
    <button onClick={ ()=> dispatch(addValue(val)) }>add
value</button>
    </>
  )
}

export default Counter
```

צרו את הSTORE בפורמט הבא באמצעות REDUX TOOLKIT

```
const state = {
  user: {
    name: "Ploni",
    email: "ploni@gmail.com"
  },
  products: [
    {id: 1, name: "Product1"},
    {id: 2, name: "Product2"},
  ],
  basket: [
    {id: 1, name: "Product1", quantity: 2}
  ]
}
```



הוסיפו את הפעולות הבאות:

-לעדכן את המשתמש -להוסיף מוצרים (מחיקת מוצרים אתגר) - להוסיף מוצרים לסל - ולנקות את הסל

```
userSlice actions: updateUser
productsSlice actions: addProduct, ( רשות removeProduct )
basketsSlice actions: addBasketProduct, clearBasket
```