

Experiment no: 6

Develop a React code to build a simple search filter functionality to display a filtered list based on the search query entered by the user.

//index.js

```
import React from 'react';
import ReactDOM from 'react-dom/client';
import './index.css';
import App from './App';
import reportWebVitals from './reportWebVitals';
const root = ReactDOM.createRoot(document.getElementById('root'));
root.render(
  <React.StrictMode>
  <App />
</React.StrictMode>
);
```

//App.js

```
import React from "react";
import SearchFilter from "./SearchFilter";
function App() {
  return (
    <div>
    <SearchFilter />
    </div>
  );
}
```

```

export default App;

//SearchFilter.jsx /// create inside src folder

import React, { useState } from "react";

import jsonData from "../data.json"; // Import JSON data


function SearchFilter() {

  const [searchQuery, setSearchQuery] = useState(""); //Creates a state variable searchQuery to
  store the text entered by the user in the search input. It's initialized as an empty string. setSearchQuery is the
  function to update this state.

  const [filteredItems, setFilteredItems] = useState(jsonData); // Initialize with all data

  // Creates a state variable filteredItems to store the array of items that match the current search query. It's initialized with the
  entire jsonData array, so initially, all items are displayed


  // Function to handle search input change

  const handleSearchChange = (e) => {

    const query = e.target.value.toLowerCase();

    setSearchQuery(query);


    // Filter the items based on the search query (searching by name in this example)

    const filtered = jsonData.filter((item) =>

      item.name.toLowerCase().includes(query)

    );

    setFilteredItems(filtered);

  };


  return (

    <div>

      <h2>Search Filter</h2>

      <input

        type="text"

```