

EXP-3.2:

Library Management UI with Search, Add, and Remove Book Functionality:

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

function LibraryApp() {
  const [books, setBooks] = useState([
    { id: 1, title: "The Great Gatsby", author: "F. Scott Fitzgerald" },
    { id: 2, title: "To Kill a Mockingbird", author: "Harper Lee" },
    { id: 3, title: "1984", author: "George Orwell" },
  ]);

  const [searchTerm, setSearchTerm] = useState("");
  const [newBook, setNewBook] = useState({ title: "", author: "" });

  // Filtered books based on search
  const filteredBooks = books.filter(
    (book) =>
      book.title.toLowerCase().includes(searchTerm.toLowerCase()) ||
      book.author.toLowerCase().includes(searchTerm.toLowerCase())
  );

  // Add book
  const addBook = () => {
    if (!newBook.title || !newBook.author) return;
    setBooks([
      ...books,
      { id: Date.now(), title: newBook.title, author: newBook.author },
    ]);
    setNewBook({ title: "", author: "" });
  };

  // Remove book
  const removeBook = (id) => {
    setBooks(books.filter((book) => book.id !== id));
  };

  return (
    <div className="min-h-screen bg-gray-100 flex flex-col items-center p-8">
      <h1 className="text-3xl font-bold mb-6">📖 Library Management</h1>

      { /* Search Bar */ }
      <input
```

```

    type="text"
    placeholder="Search books..."
    value={searchTerm}
    onChange={(e) => setSearchTerm(e.target.value)}
    className="mb-4 w-96 px-4 py-2 border rounded-lg shadow-sm focus:ring
focus:ring-blue-300"
  />

  {/* Book List */}
  <div className="w-96 bg-white rounded-xl shadow-lg p-4 mb-6">
    <h2 className="text-xl font-semibold mb-3">Available Books</h2>
    {filteredBooks.length > 0 ? (
      <ul>
        {filteredBooks.map((book) => (
          <li
            key={book.id}
            className="flex justify-between items-center border-b py-2"
          >
            <div>
              <p className="font-medium">{book.title}</p>
              <p className="text-sm text-gray-500">{book.author}</p>
            </div>
            <button
              onClick={() => removeBook(book.id)}
              className="px-3 py-1 bg-red-500 text-white rounded-lg hover:bg-red-
600"
            >
              Remove
            </button>
          </li>
        ))}
      </ul>
    ) : (
      <p className="text-gray-500">No books found</p>
    )}
  </div>

  {/* Add Book */}
  <div className="w-96 bg-white rounded-xl shadow-lg p-4">
    <h2 className="text-xl font-semibold mb-3">Add New Book</h2>
    <input
      type="text"
      placeholder="Book title"
      value={newBook.title}

```

```

        onChange={(e) => setNewBook({ ...newBook, title: e.target.value })}
        className="w-full mb-2 px-4 py-2 border rounded-lg shadow-sm
focus:ring focus:ring-green-300"
      />
      <input
        type="text"
        placeholder="Author"
        value={newBook.author}
        onChange={(e) => setNewBook({ ...newBook, author: e.target.value })}
        className="w-full mb-2 px-4 py-2 border rounded-lg shadow-sm
focus:ring focus:ring-green-300"
      />
      <button
        onClick={addBook}
        className="w-full py-2 bg-green-600 text-white rounded-lg hover:bg-
green-700"
      >
        Add Book
      </button>
    </div>
  </div>
);
}

export default LibraryApp;

```

OUTPUTS:



Library Management

Available Books

The Great Gatsby

F. Scott Fitzgerald

Remove

To Kill a Mockingbird

Harper Lee

Remove

1984

George Orwell

Remove

Add New Book

Add Book

