MINI PROJECT:

#html

<!DOCTYPE html>

<html lang="en">

<head>

    <meta charset="UTF-8">

    <meta name="viewport" content="width=device-width, initial-scale=1.0">

    <title>Library Management System</title>

    <link rel="stylesheet" href="style.css">

</head>

<body>

    <div class="container">

        <h1>Library Management System</h1>

        <!-- Add Book Section -->

        <div>

            <input type="text" id="title" placeholder="Book Title">

            <input type="text" id="author" placeholder="Author">

            <button onclick="addBook()">Add Book</button>

        </div>

        <!-- Search Section -->

        <div>

            <input type="text" id="searchInput" onkeyup="searchBooks()" placeholder="Search by title or author">

        </div>

        <!-- List of Books -->

        <ul id="bookList"></ul>

    </div>

    <script src="script.js"></script>

</body>

</html>

#css

body {

    font-family: Arial, sans-serif;

    background-color: #f5f5f5;

    margin: 0;

    padding: 0;

}

.container {

    max-width: 600px;

    margin: 20px auto;

    padding: 20px;

    background-color: #fff;

    box-shadow: 0 2px 5px rgba(0, 0, 0, 0.1);

}

h1 {

    text-align: center;

    color: #333;

}

input[type="text"] {

    width: 200px;

    padding: 8px;

    margin: 10px 5px;

    border: 1px solid #ddd;

    border-radius: 4px;

}

button {

    padding: 10px 15px;

    background-color: #4CAF50;

    color: white;

    border: none;

    border-radius: 4px;

    cursor: pointer;

}

button:hover {

    background-color: #45a049;

}

ul {

    list-style-type: none;

    padding: 0;

}

li {

    background-color: #f0f0f0;

    margin: 5px;

    padding: 10px;

    border-radius: 4px;

    display: flex;

    justify-content: space-between;

    align-items: center;

}

li button {

    background-color: #f44336;

    padding: 5px 10px;

    color: white;

    border: none;

    border-radius: 4px;

    cursor: pointer;

}

li button:hover {

    background-color: #e41c1c;

}

#java

// Array to store the books

let books = JSON.parse(localStorage.getItem('books')) || []; // Retrieve books from localStorage

// Function to add a book

function addBook() {

    // Get the title and author values from the input fields

    const title = document.getElementById('title').value;

    const author = document.getElementById('author').value;

    if (!title || !author) {

        alert("Please fill in both fields.");

        return;

    }

    // Create a book object

    const book = { title, author };

    // Add the book to the array

    books.push(book);

    // Save the updated books array to localStorage

    localStorage.setItem('books', JSON.stringify(books));

    // Clear the input fields

    document.getElementById('title').value = '';

    document.getElementById('author').value = '';

    // Display the updated book list

    displayBooks(books);

}

// Function to display the books in the list

function displayBooks(books) {

    // Get the <ul> element where books will be displayed

    const bookList = document.getElementById('bookList');

    bookList.innerHTML = ''; // Clear the existing list

    // Loop through the books array and create <li> elements for each book

    books.forEach((book, index) => {

        const li = document.createElement('li');

        li.innerHTML = `${book.title} by ${book.author} <button onclick="deleteBook(${index})">Delete</button>`;

        bookList.appendChild(li);

    });

}

// Function to delete a book

function deleteBook(index) {

    // Remove the book from the array

    books.splice(index, 1);

    // Save the updated books array to localStorage

    localStorage.setItem('books', JSON.stringify(books));

    // Display the updated book list

    displayBooks(books);

}

// Function to search for books by title or author

function searchBooks() {

    // Get the search input value

    const searchInput = document.getElementById('searchInput').value.toLowerCase();

    // Filter the books array based on the search input

    const filteredBooks = books.filter(book =>

        book.title.toLowerCase().includes(searchInput) ||

        book.author.toLowerCase().includes(searchInput)

    );

    // Display the filtered books

    displayBooks(filteredBooks);

}

// Initial call to display the books when the page loads

displayBooks(books);

Output:

