

Week 2

Code:

HTML:

```
<!DOCTYPE html>

<html>

<head>

<title>Book Library</title>

</head>

<body>

<h1>My Book Library</h1>

<form id="addBookForm">

<label for="title">Title: </label><br>

<input type="text" id="title" required><br>

<label for="author">Author:</label><br>

<input type="text" id="author" required><br>

<label for="year">Year Published:</label><br>

<input type="number" id="year" required><br>

<label for="readStatus">Read Status:</label><br>

<select id="readStatus">

<option value="read">Read</option>

<option value="unread">Unread</option>

</select><br><br><button type="submit">Add Book</button>

</form>
```

```
<br>
<button id="removeButton">Remove Last Book</button>
<h2>My Library</h2>
<ul id="libraryList"></ul>
<form id="searchForm">
  <label for="searchAuthor">Search by Author:</label>
  <input type="text" id="searchAuthor">
  <button type="submit">Search</button>
</form>
<h2>Search Results</h2>
<ul id="searchResults"></ul>
</body>
<script src="index.js"></script>
</html>
```

Script:

```
function Book(title, author, yearPublished, readStatus) {this.title = title;
this.author =
author;
this.yearPublished = yearPublished;
this.readStatus = readStatus;
}
Book.prototype.getSummary = function () {
return `${this.title} by ${this.author}, ${this.yearPublished}. Status: ${this.readStatus}`;
```

```
};

Book.prototype.toggleReadStatus = function () {
  this.readStatus = this.readStatus === 'read' ? 'unread' :
  'read';
};

const library = [];

function addBook(book) {
  library.push(book);
}

function removeLastBook() {
  library.pop();
}

function addBookToFront(book) {library.unshift(book);
}

function removeFirstBook()
{ library.shift();
}

function getAllTitles() {
  return library.map(book => book.title);
}

function getBooksByAuthor(author) {
  return library.filter(book => book.author === author);
}
```

```
function getTotalBooksPublishedBefore(year) {  
  return library.filter(book => book.yearPublished < year).length;  
}  
  
function removeBookByTitle(title) {  
  const index = library.findIndex(book => book.title === title);  
  if (index !== -1) {  
    library.splice(index, 1);  
  }  
}  
  
function getBooksByReadStatus(status) {  
  return library.filter(book => book.readStatus === status);  
}  
  
function getSubLibrary(start, end) {  
  return library.slice(start, end);  
}  
  
document.getElementById('addBookForm').addEventListener('submit', function (e)  
  { e.preventDefault();  
  const title = document.getElementById('title').value;  
  const author =  
  document.getElementById('author').value;  
  const year = parseInt(document.getElementById('year').value);  
  const readStatus = document.getElementById('readStatus').value;  
  const newBook = new Book(title, author, year, readStatus);  
  addBook(newBook);
```

```

displayLibrary()

; this.reset();

});

function displayLibrary() {
  const libraryList = document.getElementById('libraryList');

  libraryList.innerHTML = "";library.forEach(book => {

  const li =

  document.createElement('li');

  li.textContent = book.getSummary();

  libraryList.appendChild(li);

  });

}

document.getElementById('removeButton').addEventListener('click', function ()

{ removeLastBook();

displayLibrary();

});

document.getElementById('searchForm').addEventListener('submit', function (e)

{ e.preventDefault();

const searchAuthor =

document.getElementById('searchAuthor').value; const searchResults

= getBooksByAuthor(searchAuthor);

displaySearchResults(searchResults);});

function displaySearchResults(results) {

```

```
const searchResultsList =  
document.getElementById('searchResults');  
searchResultsList.innerHTML = "";  
results.forEach(book =>const li = document.createElement('li');  
li.textContent = book.getSummary();  
searchResultsList.appendChild(li);  
});  
}  
displayLibrary();
```

OutPut:

← → ↻ 127.0.0.1:5500/vaishnav.html

My Library

Title:

Author:

Year Published:

Read Status:

My Library

Search by Author:

Search Results