MINIPROJECT-2

Personal Library :
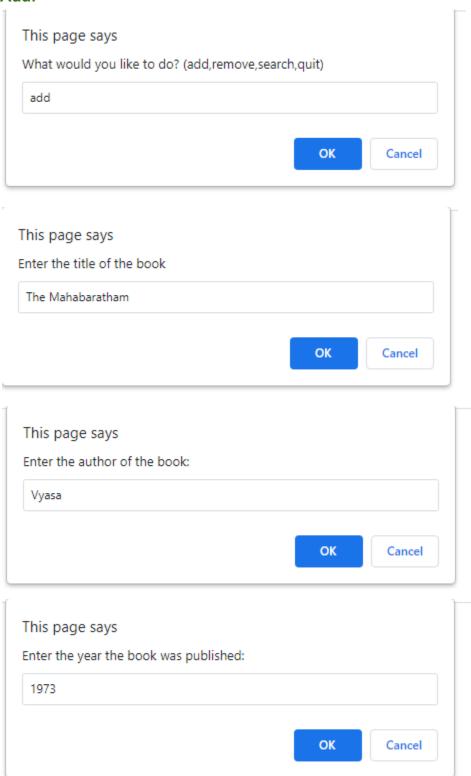
```
<script>
    class Book{
      constructor(title,author,YearPublished,readStatus){
        this.title=title;
        this.author=author;
        this.YearPublished=YearPublished;
        this.readStatus=readStatus;
      }
      getSummary(){
        return `${this.title} by ${this.author} published in
${this.YearPublished}. ${tjis.readStatus}`;
      }
      toggleReadStatus(){
        if(this.readStatus=="read")
          this.readStstus="unread";
        else
          this.readStatus="read";
      }


    }
    const library=[];
    function addBook(book){
        library.push(book);
    }
    function removeLastBook(){
        library.pop();
    }
    function addBookToFront(book){
        library.unshift(book);
    }
    function removeLastBook(){
        library.shift();
    }
    function getAllTitles(){
```

```javascript
        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).reduce((count)=>count+1,0));
    }
    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==readStatus);
    }
    function getSubLibrary(start, end){
        return library.aplice(start,end);
    }
    while(true){
        const action = prompt("What would you like to do?
(add,remove,search,quit)");
        if(action === "add"){
            const title = prompt("Enter the title of the book");
            const author = prompt("Enter the author of the book:");
    const yearPublished = prompt("Enter the year the book was
published:");
    const readStatus = prompt("Enter the read status of the book (read or
unread):");
    const book = new Book(title, author, yearPublished, readStatus);
    addBook(book);
    alert("Book added to library.");
  } else if (action === "remove") {
    const title = prompt("Enter the title of the book to remove:");
    const books = removeBookByTitle(title);
    alert("Book removed from library.");
  } else if (action === "search") {
    const searchType = prompt("Enter the type of search (author, title,
read status):");
```
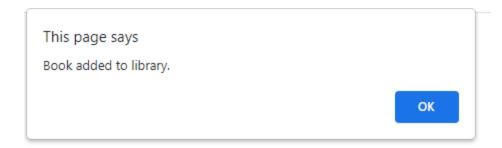
```javascript
    if (searchType === "author") {
      const author = prompt("Enter the author to search for:");
      const books = getBooksByAuthor(author);
       alert("Yhe author is...")
    } else if (searchType === "title") {
      const title = prompt("Enter the title to search for:");
       library.filter((book) => book.title === title);
        alert("Ur title is");
    } else if (searchType === "read status") {
      const status = prompt("Enter the read status to search for (read or
unread):");
      const books = getBooksByReadStatus(status);
      alert("Thank u for ur search");
    }
    let results = "Search results:\n";
    for (const book of books) {
      results += book.getSummary() + "\n";
    }
    alert(results);
  } else if (action === "quit") {
    break;
  } else {
    alert("Invalid action.");
  }
}
```
</script>

Output:

Add:

This page says

What would you like to do? (add,remove,search,quit)

add

OK   Cancel

This page says

Enter the title of the book

The Mahabaratham

OK   Cancel

This page says

Enter the author of the book:

Vyasa

OK   Cancel

This page says

Enter the year the book was published:

1973

OK   Cancel

This page says

Book added to library.

OK

Remove:

This page says

Enter the title of the book to remove:

The Millionare

OK Cancel

This page says

Book removed from library.

OK