EXPERIMENT NO. 8 - AngularJS

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D.O.P.	**20/03/2025**
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Sign and Grade	

AIM : To study AngularJS

OVERVIEW OF TASKS PERFORMED :

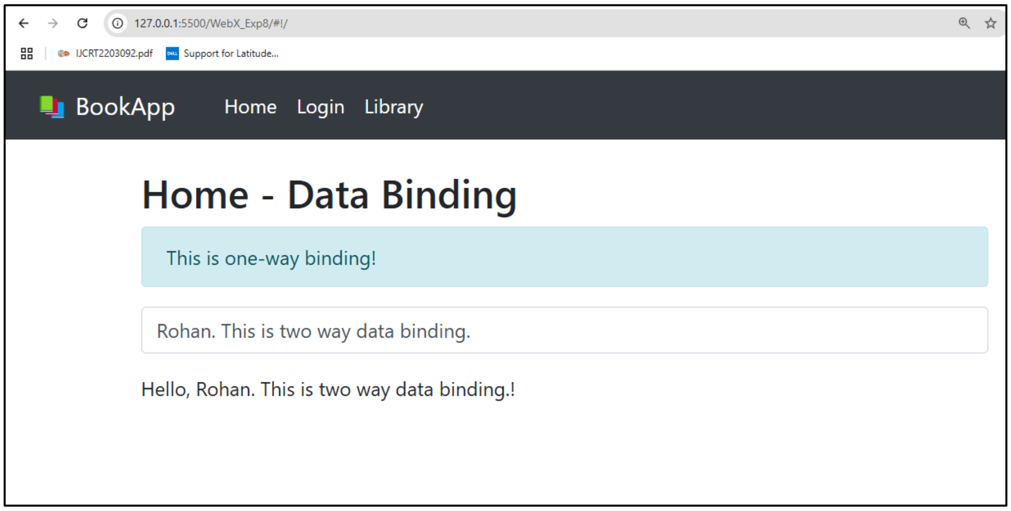
The experiment explores key concepts in AngularJS, including **one-way and two-way data binding** through a demonstration. A **basic authentication system** was implemented with a login page that validates hardcoded credentials and displays success or error messages accordingly. The use of **AngularJS controllers, modules, and form directives** was demonstrated. A **custom filter (bookFilter)** was created to enable users to search for books by title, author, or genre. Additionally, a **reusable custom service** was developed to handle user authentication and integrated into the application for modularity and reusability.

GITHUB LINK -

https://github.com/Rohan-Lalchandani08/WebX_Lab/tree/main/WebX%20Exp%207/WebX%20Exp8

OUTPUT

a) Home Page



Home - Data Binding

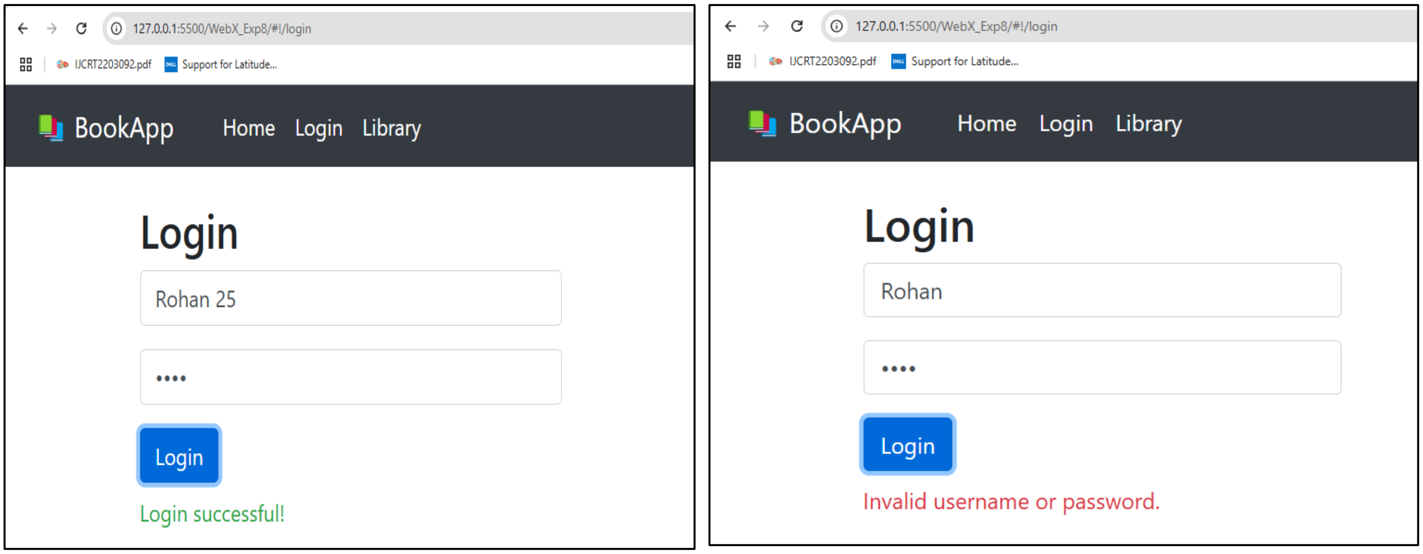
This is one-way binding!

Rohan. This is two way data binding.

Hello, Rohan. This is two way data binding.!

This screenshot displays the homepage of the AngularJS application. It provides navigation links to different sections such as the login page and the book search page. The page demonstrates AngularJS directives like `ng-app` for module initialization and `ng-controller` for managing application logic.

b) Login Page



Login

Rohan 25

••••

Login successful!

Login

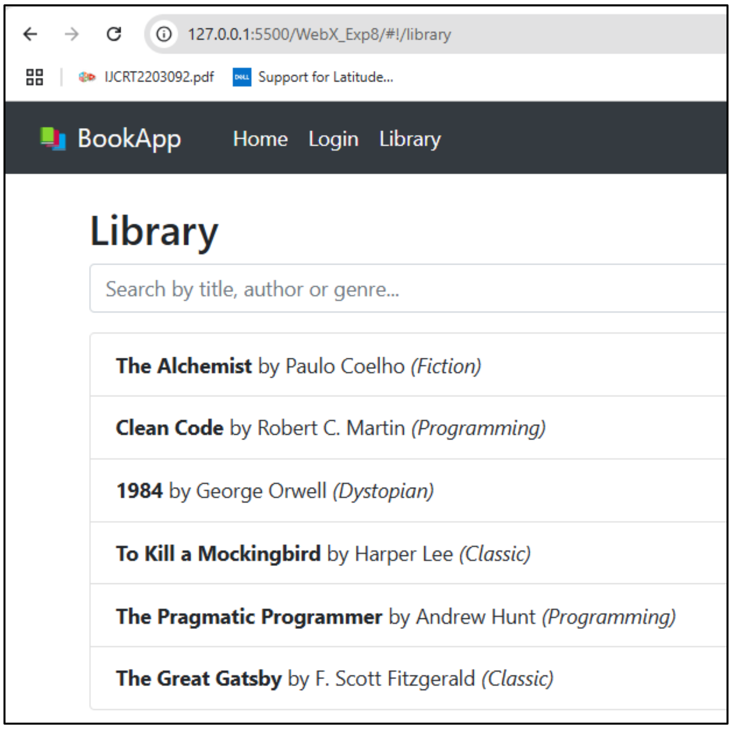
Rohan

••••

Invalid username or password.

This screenshot shows the login form where users enter their username and password. It demonstrates AngularJS form directives (`ng-model` for data binding, `ng-submit` for form submission) and a custom authentication service to verify credentials. Upon submitting the form, the system checks for hardcoded credentials. If correct, a success message appears; otherwise, an error message is displayed.

c) Library page



Library

Search by title, author or genre...

The Alchemist by Paulo Coelho *(Fiction)*

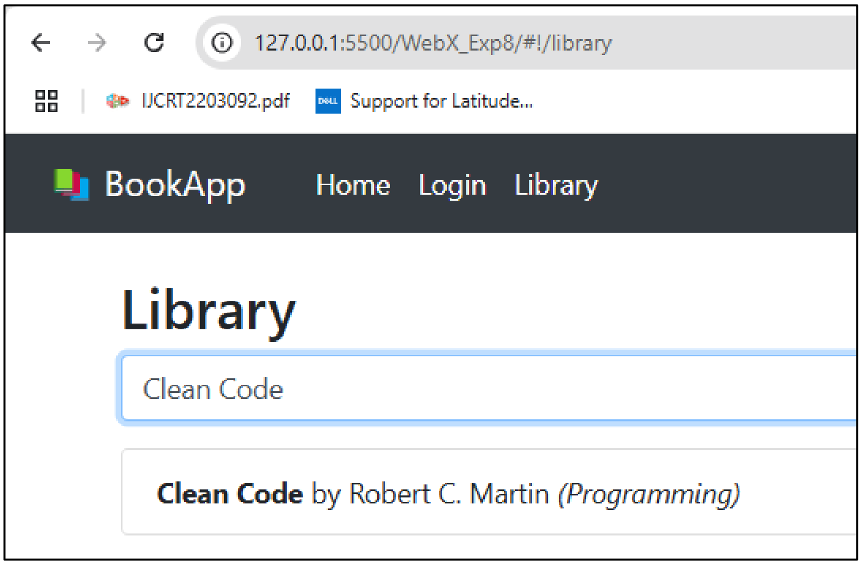
Clean Code by Robert C. Martin *(Programming)*

1984 by George Orwell *(Dystopian)*

To Kill a Mockingbird by Harper Lee *(Classic)*

The Pragmatic Programmer by Andrew Hunt *(Programming)*

The Great Gatsby by F. Scott Fitzgerald *(Classic)*



Library

Clean Code

Clean Code by Robert C. Martin *(Programming)*

This screenshot displays search functionality for books based on title, author, or genre.It demonstrates the implementation of a custom AngularJS filter

(`bookFilter`) that dynamically filters book data as the user types in the search field.

`ng-repeat` is used to loop through and display book data dynamically.

CONCLUSION:

In this experiment, we successfully explored **AngularJS** by implementing **one-way and two-way data binding**, a **basic authentication system**, and a **custom book search filter**. We used **AngularJS directives, controllers, services, and filters** to build an interactive web application. The **login system** validated user credentials, while the **book search feature** demonstrated custom filtering. Additionally, we implemented **form validation** using built-in AngularJS directives. This experiment provided hands-on experience in developing **dynamic, modular, and responsive applications** using AngularJS.