# ASHWADH A

# 231501022

# AIML 'A'

# LAB EXPERIMENT : 08

Consider a Library Management System. Develop a JavaScript program that will validate the controls in the forms you have created for the application. State the assumptions you make (business logic you are taking into consideration). Note: Your application must access a database using Servlet/JSP.

# AIM:

To design and implement a Library Management System with client-side validation using JavaScript and server-side processing using JSP and Servlets, which interacts with a MySQL database.

# ALGORITHM:

1. Create an HTML/JSP form to capture book details.
2. Use JavaScript to validate the fields on the client side.
3. On successful validation, send the data to a Servlet using a POST request.
4. The Servlet connects to MySQL, checks for duplicates, and inserts the new book.
5. Show success or failure messages based on the server response.

# SOURCE CODE:

<!DOCTYPE html>

<html>

<head>

<title>Library - Add Book</title>

<script>

function validateForm() {

let title = document.forms["bookForm"]["title"].value;

let author = document.forms["bookForm"]["author"].value; let isbn = document.forms["bookForm"]["isbn"].value;

let year = document.forms["bookForm"]["year"].value;

if (!title || !author || !isbn || !year) { alert("All fields are required."); return false;

}

if (!/^\d{13}$/.test(isbn)) {

alert("ISBN must be a 13-digit number."); return false;

}

if (!/^\d{4}$/.test(year) || year < 1000 || year > new Date().getFullYear()) {

alert("Enter a valid year."); return false;

}

return true;

}

</script>

</head>

<body>

<h2>Add New Book</h2>

<form name="bookForm" action="AddBookServlet" method="post" onsubmit="return validateForm();">

Title: <input type="text" name="title"><br><br> Author: <input type="text" name="author"><br><br>

ISBN (13-digit): <input type="text" name="isbn"><br><br> Published Year: <input type="text" name="year"><br><br>

<input type="submit" value="Add Book">

</form>

</body>

</html>

# RESULT :

* Validated user input using JavaScript on the client-side.
* Successfully inserted valid book data into the MySQL database using JSP and Servlets.
* Prevented duplicate ISBNs via server-side check.

OUTPUT:

