This documentation provides an overview of the Part of the project, a movie management application: displayAllMovies.jsp, addMovie.jsp, and index.jsp. Each file serves a specific purpose in the application, allowing users to view, add, and navigate through movie data.

*1. displayAllMovies.jsp*

The displayAllMovies.jsp file is responsible for displaying a list of all movies stored in the database. It connects to a MySQL database, retrieves movie data, and presents it in a structured HTML table format.

Key Components:

* **Database Connection**: The file establishes a connection to the MySQL database using JDBC.
* **SQL Query Execution**: It executes a SQL query to fetch all records from the steve\_movies\_data table.
* **Dynamic Content Generation**: The retrieved data is dynamically inserted into the HTML table using JSP scriptlets.
* **Easy navigation**: On this page, you also have the option to return to the welcome page or add a new movie.

<%@ page import=*"java.sql.\*"* %>

<%@ page import=*"java.math.BigDecimal"* %>

<%@ page contentType=*"text/html;charset=UTF-8"* language=*"java"* %>

<html>

<head>

<title>All Movies</title>

<style>

**table** {

border-collapse: *collapse*;

width: *80%*;

margin: *20px auto*;

}

**th,** **td** {

border: *1px solid black*;

text-align: *left*;

padding: *8px*;

}

**th** {

background-color: *#f2f2f2*;

}

</style>

</head>

<body>

<h1>All Movies</h1>

<table>

<tr>

<th>ID</th>

<th>Title</th>

<th>Genres</th>

<th>Release Date</th>

<th>IMDB Rating</th>

</tr>

<%

// Database connection parameters

String url = "jdbc:mysql://localhost:3306/csd430"; // URL for the MySQL database

String user = "student1"; // Database username

String password = "pass"; // Database password

Connection conn = **null**; // Connection object

Statement stmt = **null**; // Statement object

ResultSet rs = **null**; // ResultSet object

**try** {

Class.forName("com.mysql.cj.jdbc.Driver"); // Load MySQL JDBC driver

conn = DriverManager.getConnection(url, user, password); // Establish connection to the database

stmt = conn.createStatement(); // Create a statement object to execute SQL queries

String sql = "SELECT \* FROM steve\_movies\_data"; // SQL query to select all movies

rs = stmt.executeQuery(sql); // Execute the SQL query

**while** (rs.next()) { // Iterate through the result set

**int** id = rs.getInt("id"); // Retrieve movie ID

String title = rs.getString("title"); // Retrieve movie title

String genres = rs.getString("genres"); // Retrieve movie genres

Date releaseDate = rs.getDate("release\_date"); // Retrieve movie release date

BigDecimal imdbRating = rs.getBigDecimal("imdb\_rating"); // Retrieve movie IMDB rating

%>

<tr>

<td><%= id %></td>

<td><%= title %></td>

<td><%= genres %></td>

<td><%= releaseDate %></td>

<td><%= imdbRating %></td>

</tr>

<%

}

} **catch** (Exception e) {

out.println("<tr><td colspan='5'>Error loading movies: " + e.getMessage() + "</td></tr>"); // Display error message if an exception occurs

} **finally** {

**if** (rs != **null**) **try** { rs.close(); } **catch** (SQLException ignore) {} // Close ResultSet

**if** (stmt != **null**) **try** { stmt.close(); } **catch** (SQLException ignore) {} // Close Statement

**if** (conn != **null**) **try** { conn.close(); } **catch** (SQLException ignore) {} // Close Connection

}

%>

</table>

<br>

<a href=*"index.jsp"*>Back to Welcome</a>

<br>

<a href=*"addMovie.jsp"*>Add a new Movie to list?</a>

<br>

</body>

</html>

*2. addMovie.jsp*

The addMovie.jsp file allows users to add new movies to the database. It contains a form for user input and handles the submission of movie details.

Key Components:

* **Form Handling**: The form collects movie titles, genres, release dates, and IMDb ratings.
* **Database Insertion**: Upon form submission, the file connects to the database and inserts the new movie record.
* **Easy navigation**: On this page, you also have the option to return to the welcome page or display all movies in the database.

<%@ page import=*"java.sql.\*"* %>

<%@ page import=*"java.math.BigDecimal"* %>

<%@ page contentType=*"text/html;charset=UTF-8"* language=*"java"* %>

<html>

<head>

<title>Add New Movie</title>

</head>

<body>

<h1>Add New Movie</h1>

<form action=*"addMovie.jsp"* method=*"post"*>

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

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

<label for=*"genres"*>Genres:</label>

<input type=*"text"* name=*"genres"* id=*"genres"*><br><br>

<label for=*"release\_date"*>Release Date:</label>

<input type=*"date"* name=*"release\_date"* id=*"release\_date"* required><br><br>

<label for=*"imdb\_rating"*>IMDB Rating:</label>

<input type=*"number"* name=*"imdb\_rating"* id=*"imdb\_rating"* step=*"0.1"* min=*"0"* max=*"10"* required><br><br>

<input type=*"submit"* value=*"Add Movie"*>

</form>

<%

// Handle form submission

String title = request.getParameter("title"); // Retrieve the movie title from the form

String genres = request.getParameter("genres"); // Retrieve the movie genres from the form

String releaseDate = request.getParameter("release\_date"); // Retrieve the release date from the form

String imdbRating = request.getParameter("imdb\_rating"); // Retrieve the IMDB rating from the form

**if** (title != **null** && !title.isEmpty()) {

// Database connection parameters

String url = "jdbc:mysql://localhost:3306/csd430"; // Database URL

String user = "student1"; // Database username

String password = "pass"; // Database password

Connection conn = **null**; // Initialize connection variable

PreparedStatement pstmt = **null**; // Initialize prepared statement variable

**try** {

Class.forName("com.mysql.cj.jdbc.Driver"); // Load MySQL JDBC driver

conn = DriverManager.getConnection(url, user, password); // Establish database connection

String sql = "INSERT INTO steve\_movies\_data (title, genres, release\_date, imdb\_rating) VALUES (?, ?, ?, ?)"; // SQL insert statement

pstmt = conn.prepareStatement(sql); // Prepare the SQL statement

pstmt.setString(1, title); // Set the title parameter

pstmt.setString(2, genres); // Set the genres parameter

pstmt.setDate(3, Date.valueOf(releaseDate)); // Set the release date parameter

pstmt.setBigDecimal(4, **new** BigDecimal(imdbRating)); // Set the IMDB rating parameter

pstmt.executeUpdate(); // Execute the insert operation

out.println("<p>Movie added successfully!</p>"); // Output success message

} **catch** (Exception e) {

out.println("<p>Error adding movie: " + e.getMessage() + "</p>"); // Output error message

} **finally** {

**if** (pstmt != **null**) **try** { pstmt.close(); } **catch** (SQLException ignore) {} // Close prepared statement

**if** (conn != **null**) **try** { conn.close(); } **catch** (SQLException ignore) {} // Close database connection

}

}

%>

<br>

<a href=*"index.jsp"*>Back to Welcome</a>

<p><a href=*"displayAllMovies.jsp"*>Display all movies recorded</a>

</body>

</html>

*index.jsp*

The index.jsp file serves as the application's welcome page. It provides links to other functionalities, such as adding a new movie and displaying all films. That file will be modified throughout the project, as it is used as the main page of the project.

Key Components:

* **Navigation Links**: The page includes links to addMovie.jsp and displayAllMovies.jsp, facilitating easy navigation.

<%@ page import=*"java.util.List"* %> <!-- Importing the List class from the java.util package -->

<%@ page import=*"com.example.MovieBean"* %> <!-- Importing the MovieBean class from the com.example package -->

<%@ page import=*"com.example.Movie"* %> <!-- Importing the Movie class from the com.example package -->

<%@ page contentType=*"text/html;charset=UTF-8"* language=*"java"* %> <!-- Setting the content type to HTML with UTF-8 encoding -->

<!DOCTYPE html>

<html>

<head>

<title>Document and Movie Selection</title>

<style>

**body** {

background-color: *#D3D3D3*; <!-- Setting the background color of the body to light gray -->

}

</style>

</head>

<body>

<h1>Word Document List</h1>

<ul>

<!-- Replace the items below with the actual paths to your Word documents -->

<li><a href=*"documents/Stylin\_\_movies\_data.docx"*>Module 5.1 Documentation</a></li> <!-- Link to Module 5.2 documentation -->

<li><a href=*"documents/Stylin\_module6\_database\_connection.docx"*>Module 6.1 Documentation</a></li> <!-- Link to Module 6.2 documentation -->

<li><a href=*"documents/Stylin\_module7\_part2.docx"*>Module 7.2 Documentation</a></li> <!-- Link to Module 7.2 documentation -->

</ul>

<h1> Project Part I</h1>

<h3>Select a Movie</h3>

<p><a href=*"selectMovie.jsp"*>Click here to select a movie</a></p> <!-- Link to the movie selection page -->

<h1> Project Part II</h1>

<h3>Add a New Movie</h3>

<p><a href=*"addMovie.jsp"*>Click here to add a new movie</a></p> <!-- Link to the add movie page -->

<footer>

<p>Author: Steve Stylin</p> <!-- Displaying the author's name -->

<p>School: Bellevue University</p> <!-- Displaying the school name -->

<p>Professor: Darrell Payne</p> <!-- Displaying the professor's name -->

</footer>

</body>

</html>

* **Document Links**: It also provides links to relevant project documentation.