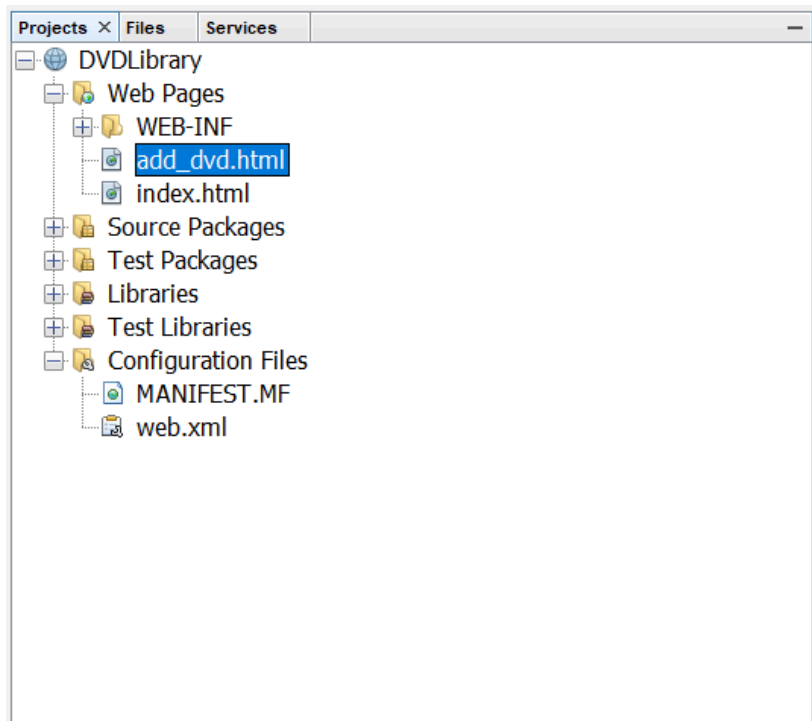


# LAB 5 WEEK 4 - CSC584

## 1. Developing the AddDVD form

TASK 1: Develop the HTML Form

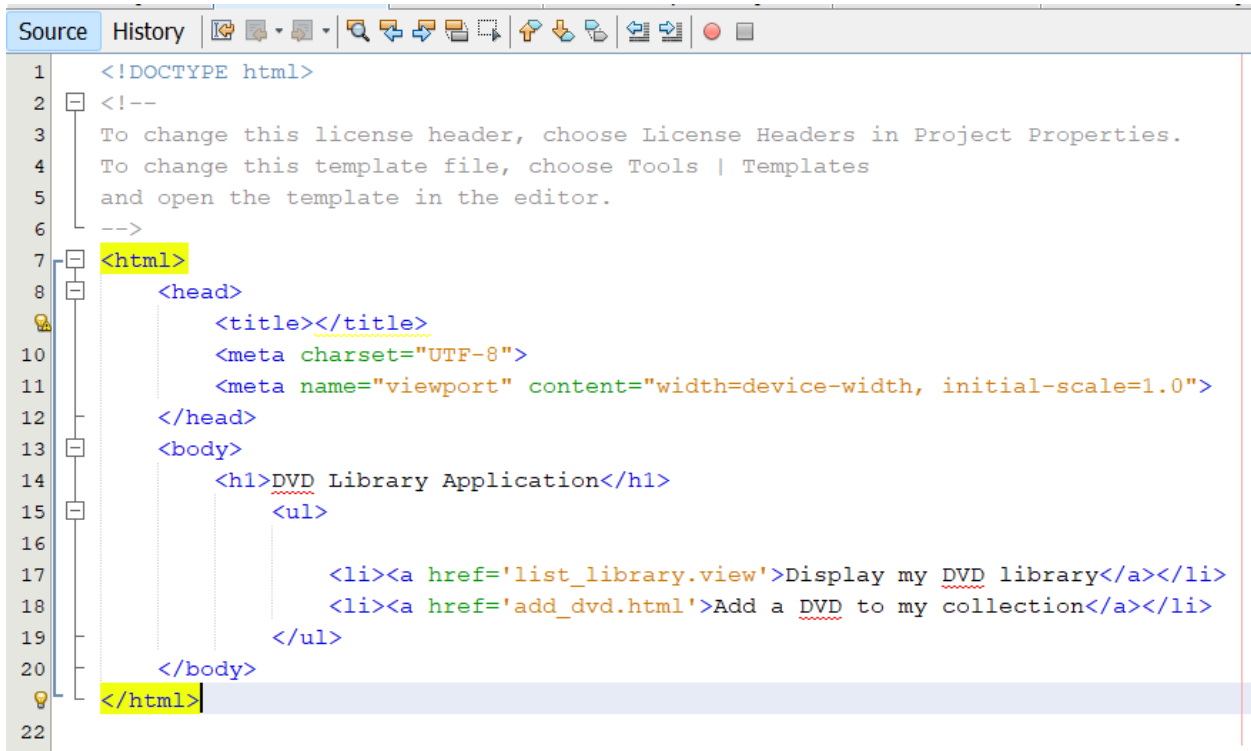
a)



b) + c)

```
Source History
5 and open the template in the editor.
6 -->
7 <html>
8 <head>
9 <title>DVD Library Application: Add DVD Form</title>
10 <meta charset="UTF-8">
11 <meta name="viewport" content="width=device-width, initial-scale=1.0">
12 </head>
13 <body>
14 <h1>Add DVD</h1>
15 <form action='add_dvd.do' method='POST'>
16 Title: <input type='text' name='title'> <br><br>
17 Year: <input type='text' name='year'> <br><br>
18 Genre: <select name='genre'>
19 <option value='Sci-Fi'>Sci-Fi</option>
20 <option value='Drama'>Drama</option>
21 <option value='Comedy'>Comedy</option>
22 </select>
23 or new genre: <input type='text' name='newGenre'><br><br>
24 <input type='submit'>
25 </form>
26 </body>
27 </html>
28
```

## TASK 2: Modify the Home Page



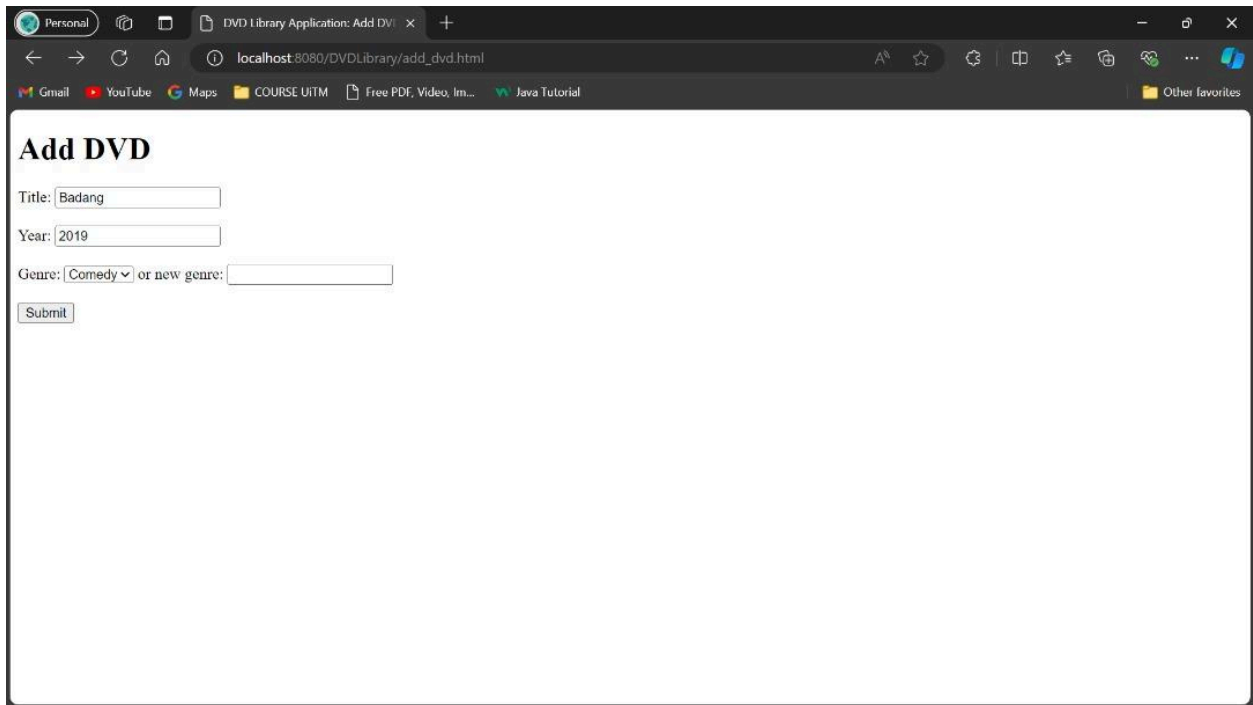
```
1 <!DOCTYPE html>
2 <!--
3 To change this license header, choose License Headers in Project Properties.
4 To change this template file, choose Tools | Templates
5 and open the template in the editor.
6 -->
7 <html>
8 <head>
9 <title></title>
10 <meta charset="UTF-8">
11 <meta name="viewport" content="width=device-width, initial-scale=1.0">
12 </head>
13 <body>
14 <h1>DVD Library Application</h1>
15 <ul>
16
17 <li><a href='list_library.view'>Display my DVD library</a></li>
18 <li><a href='add_dvd.html'>Add a DVD to my collection</a></li>
19 </ul>
20 </body>
21 </html>
22
```

## Task 3: Deploy the web application



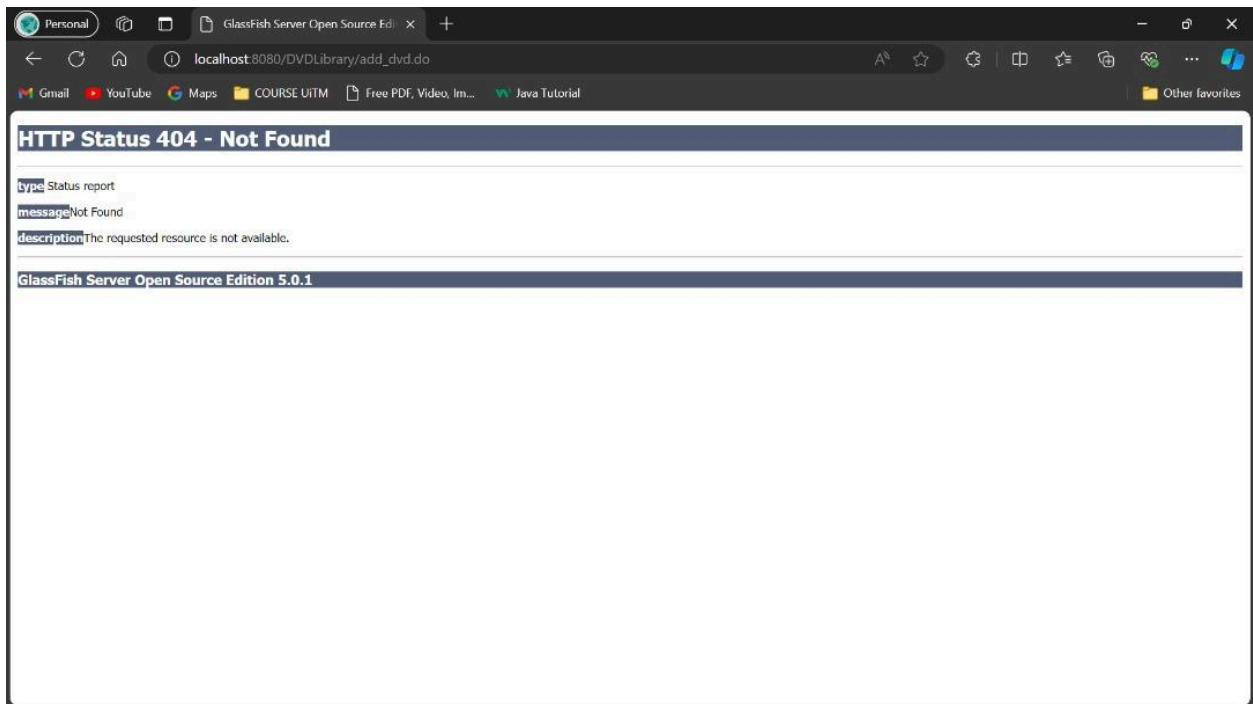
```
html > head > title >
Variables Output X
Java DB Database Process x GlassFish Server (1) x DVDLibrary (run-deploy) x
ant -f C:\Users\nasru\OneDrive\Documents\NetBeansProjects\DVDLibrary -Dmb.internal.action.name=redeploy -Ddirectory.deployment.supported=true -DforceRedeploy=true -Dmb.wait.for.cach
init:
deps-module-jar:
deps-ear-jar:
deps-jar:
library-inclusion-in-archive:
library-inclusion-in-manifest:
compile:
compile-jsp:
In-place deployment at C:\Users\nasru\OneDrive\Documents\NetBeansProjects\DVDLibrary\build\web
run-deploy:
BUILD SUCCESSFUL (total time: 0 seconds)
```

## Task 4: Test the AddDVD Form



The screenshot shows a web browser window with the address bar displaying `localhost:8080/DVDLibrary/add_dvd.html`. The page title is "Add DVD". The form contains the following elements:

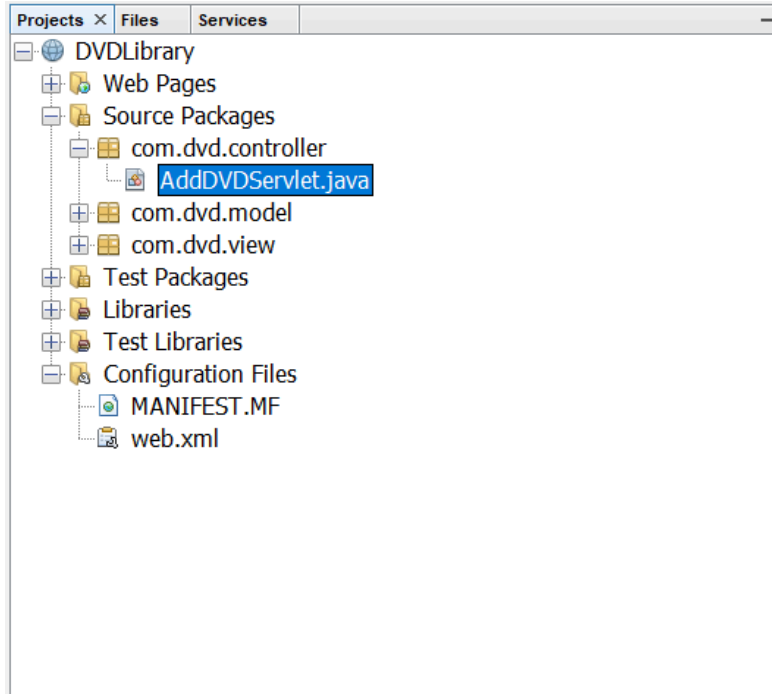
- Title:
- Year:
- Genre:  or new genre:
- Submit:



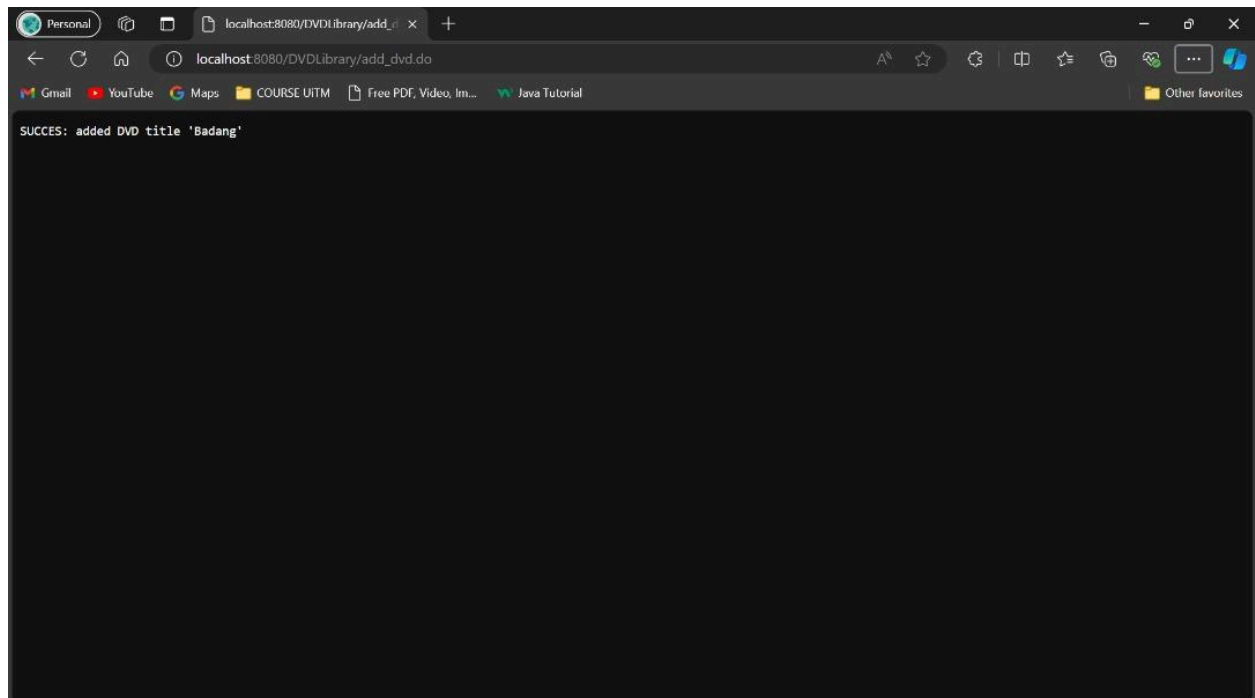
## 2. Developing a controller servlet

Task 1: Develop the controller Servlet

a)

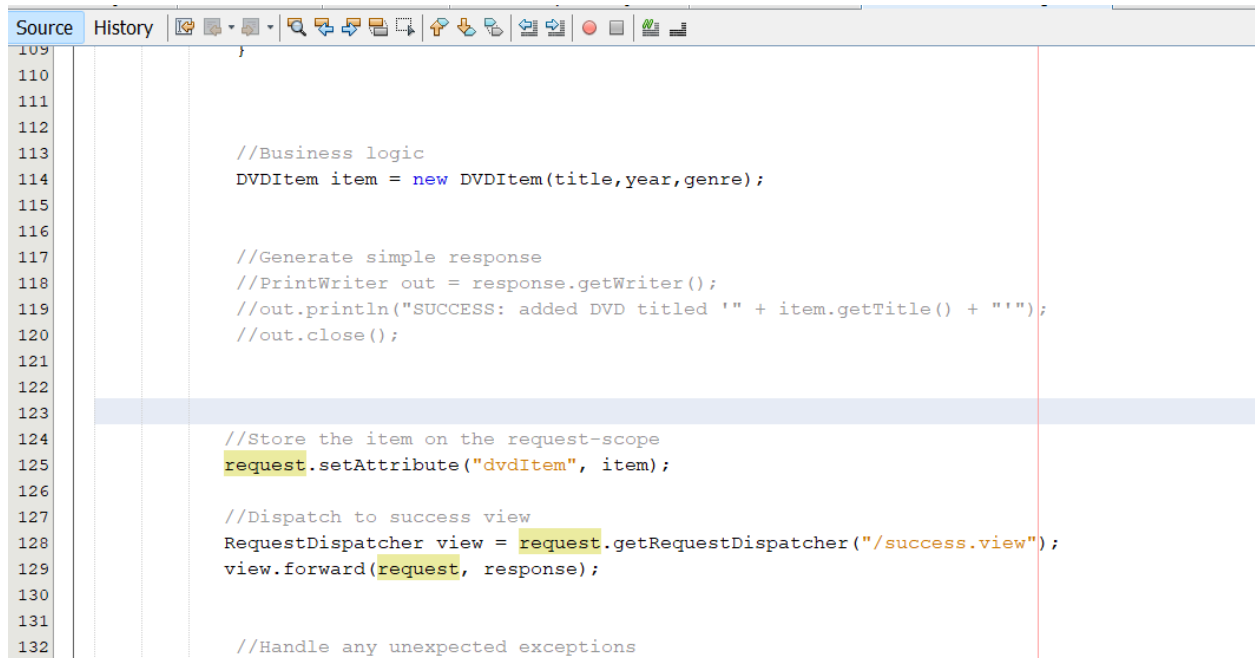


## Task 2: Deploy the Web Application & TASK 3: Test the AddDVDServlet

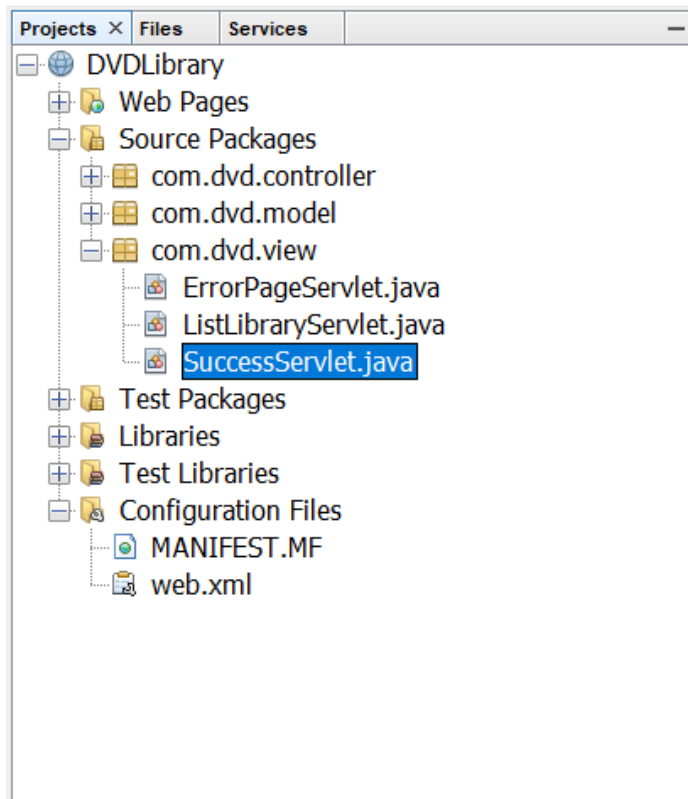


### 3. Developing the success view servlet

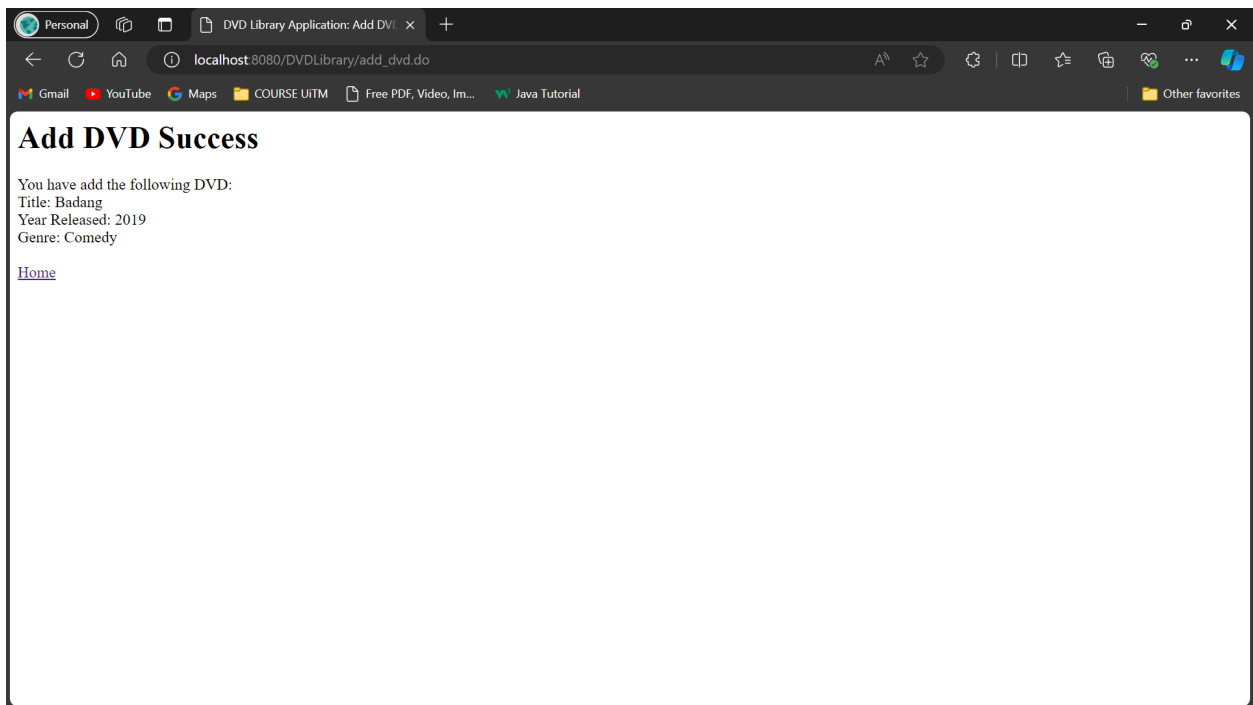
#### Task 1: Modify the Add DVD Controller Servlet



## Task 2: Develop the success View Servlet



## Task 3: Deploy the Web Application



## 4. Developing the Error View Servlet

### Task 1: Modify the Add DVD Controller Servlet

a) + b) + c) + d)

```
@Override
protected void doPost(HttpServletRequest request, HttpServletResponse response)
    throws ServletException, IOException {
    //processRequest(request, response);
    List errorMsgs = new LinkedList();

    try{
        //Retrieve form parameters
        String title = request.getParameter("title");
        String year = request.getParameter("year");
        //Did the user type in a genre?
        String genre = request.getParameter("newGenre");
        // if not, use the drop-down list value
        if( (genre == null) || (genre.trim().length() == 0 ) {
            genre = request.getParameter("genre");
        }

        //Form verification
        if( title == null || title.trim().length() == 0){
            errorMsgs.add("Please enter the DVD title. ");
        }
        if( year == null || year.trim().length() == 0){
            errorMsgs.add("Please enter the year of released for the DVD. ");
        }
        else if( !year.trim().matches("\\d\\d\\d\\d\\d\\d")){
            errorMsgs.add("Please enter a valid year.");
        }

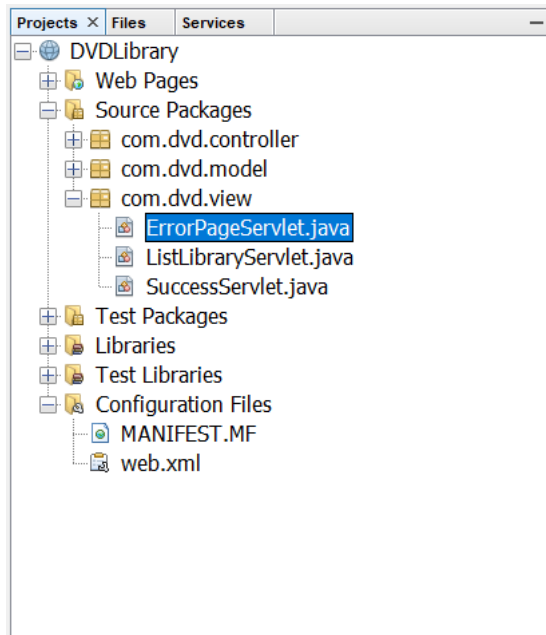
    }
    if( ! errorMsgs.isEmpty() ){
        request.setAttribute("errorMsgs", errorMsgs);
        RequestDispatcher view = request.getRequestDispatcher ("/error.view");
        view.forward(request, response);
        return;
    }
}
```

e)

```
        //Handle any unexpected exceptions
    } catch (RuntimeException e) {
        errorMsgs.add("An unexpected error: " + e.getMessage());
        request.setAttribute("errorMsgs", errorMsgs);
        RequestDispatcher view = request.getRequestDispatcher ("/error.view");
        view.forward(request, response);
    }
}
```

## Task 2: Create the Error View Servlet

a)

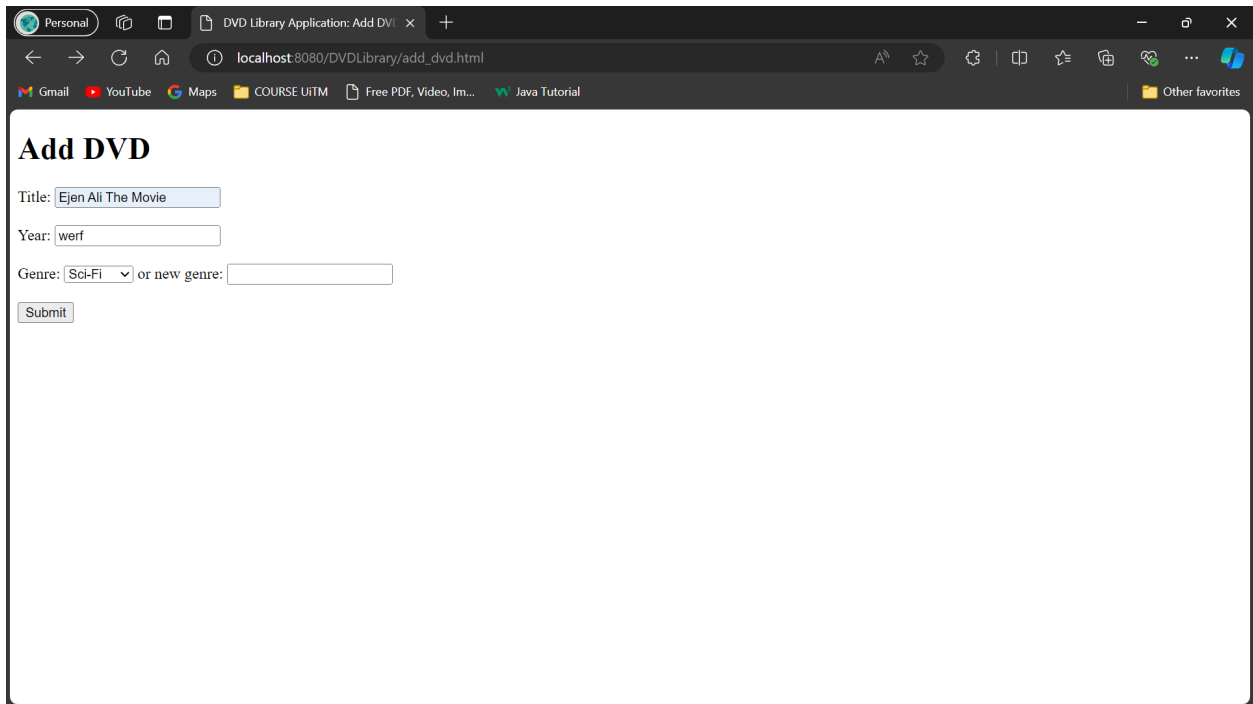


## Task 3: Configure the Error View Servlet

```
<?xml version="1.0" encoding="UTF-8" ?>
<web-app xmlns="http://xmlns.jcp.org/xml/ns/javaee"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:schemaLocation="http://xmlns.jcp.org/xml/ns/javaee
    http://xmlns.jcp.org/xml/ns/javaee/web-app_3_1.xsd"
  version="3.1">
  <servlet>
    <servlet-name>ListLibraryServlet</servlet-name>
    <servlet-class>com.dvd.view.ListLibraryServlet</servlet-class>
  </servlet>
  <servlet>
    <servlet-name>ErrorPageServlet</servlet-name>
    <servlet-class>com.dvd.view.ErrorPageServlet</servlet-class>
  </servlet>
  <servlet-mapping>
    <servlet-name>ListLibraryServlet</servlet-name>
    <url-pattern>/list_library.view</url-pattern>
  </servlet-mapping>
  <servlet-mapping>
    <servlet-name>ErrorPageServlet</servlet-name>
    <url-pattern>/error.view</url-pattern>
  </servlet-mapping>
  <session-config>
```



## Task 4: Deploy the Web Application



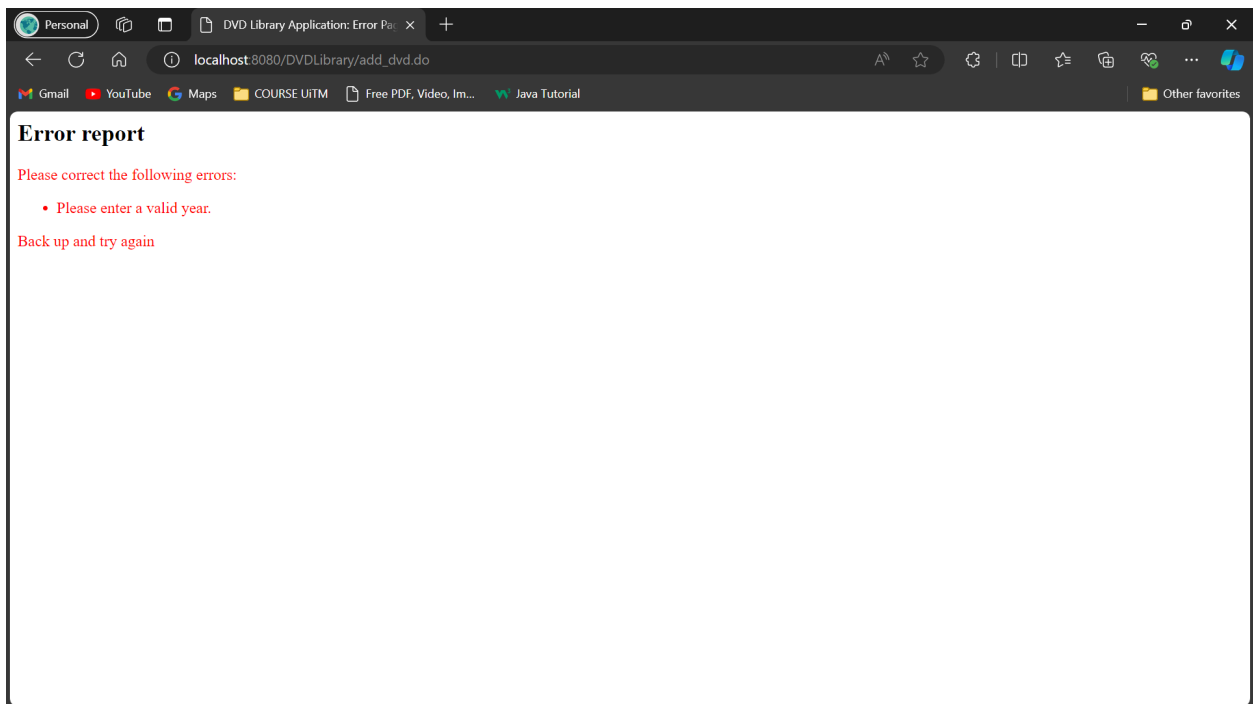
A screenshot of a web browser window. The address bar shows 'localhost:8080/DVDLibrary/add\_dvd.html'. The page has a title 'Add DVD'. Below the title, there are three input fields: 'Title' with the value 'Ejen Ali The Movie', 'Year' with the value 'werf', and 'Genre' with a dropdown menu showing 'Sci-Fi' and a text input for 'or new genre:'. A 'Submit' button is located below these fields.

**Add DVD**

Title:

Year:

Genre:  or new genre:



A screenshot of a web browser window. The address bar shows 'localhost:8080/DVDLibrary/add\_dvd.do'. The page has a title 'Error report'. Below the title, there is a red message 'Please correct the following errors:' followed by a bulleted list with one item: 'Please enter a valid year.' Below the list, there is a red message 'Back up and try again'.

**Error report**

Please correct the following errors:

- Please enter a valid year.

Back up and try again