MVC Web Application

Description:

You will create a new dynamic web project and build a Java web application that allows users to enter movies into a database.

The application should allow users to view all movies unsorted, sorted by title, and sorted by length in minutes. Users should also be able to search movies by title, and by director.

All JavaServer Pages (JSPs) should use JSP Expression Language (EL) and JSTL appropriately.

Java Servlets should be used as Controllers to handle requests from the user interface and provide appropriate responses to users.

Build a dynamic website with an MVC architecture.

1. Create JSPs as necessary for the Views of the web application.
2. Create Java Servlets as necessary for the Controllers of the web application to handle actions from the user and to route responses.
3. Validate user inputs, process those inputs, and provide responses based on the results.
4. Apply previous learning such as HTML, CSS, JavaScript, etc…, to build a rich web application.

Requirements:

- Create a new dynamic web project.
- Convert the project to a Maven Project.
- Define all dependencies needed by the application in the pom.xml file.
- Create the necessary Data Access Object (DAO) code for managing a database with a table named "movie".
- Create a JSP page with a form that allows users to add new movies to the Movie database. A new movie should include the title, director, and number of minutes in length.
- Create a new Java Servlet as a Controller to handle the "Add Movie" form submission for the "add movie" JSP page. In the Controller, validate the data received from the form before adding the new Movie to the database (it is okay if the validation is simple: all parameters should be not null and not empty in order for the data to be valid). If the data is not valid, the request should result in an error response.
- Create success and error JSPs to handle the View for the results of submitting the "Add Movie" form.
- Create a new Java Servlet as a Controller to handle the View All functionality for unsorted, sorted by title, and sorted by length in minutes.
- Create a new Java Servlet as a Controller to handle the Search functionality for searching movies by title and by director.
- Include navigation that uses the correct URL Mappings for the Controller Servlets created to handle interactions for the Java web application. Note: Don't forget to include the "GET" parameters for the View All sort logic if needed (e.g. "?sortType=title").
- Test the entire web application and confirm it functions appropriately.
- Refactor/rename the project so its name reflects the naming convention we use for all projects in this course: "ProjectName_username".
- Export the project as an Archive File and submit to the Dropbox.