

UNIVERSITY OF REGINA
Department of Computer Science
CS 215 – Web & Database Programming
Fall 2019

Assignment #5: Movie Database Website – Server-Side Programming

Posted: Wednesday, November 13, 2019 at 6 AM

Due: Wednesday November 27, 2019 by 11:55 PM

This is the fourth in the series of assignments for building a movie database website. In the first of these assignments, you built an interface mock-up of the site. For the second one, you used JavaScript to implement the form validation and to support other types of interaction. In the third assignment, you designed and built the database. For this assignment, you will use PHP to implement server-side programming. The last assignment will focus on performing AJAX-based updating of the website. Because the assignments build upon each other, you may wish to make modifications to your previous assignment submission before starting this assignment.

Now that you have designed and constructed the database, the next step is to use PHP to access the database and dynamically construct specific elements of the web pages. Before inserting any data in the database, make sure you validate the data coming from the client-side.

Note: Convert all your HTML files to PHP files. Your PHP code won't execute unless the file extension is .php.

Note: PHP files are executed only on a **server**. Do not try to run it locally on a browser.

This assignment is divided into two different components:

1. PHP Database Entry & File Upload

There are a number of pages that result in the database being updated with new information. These pages are listed below, with an explanation of what is to be done for each.

a) Login page

- Validate the form data to ensure that the required fields are present and that they do not contain illegal data; if there is a problem, return to the sign-up page with a generic error message.
- If the data is good, add it to the database and return the user to the Login Page so they can login.
- For the user avatar image/graphic upload, move the image file to an appropriate location within the web application file structure, and save its location (URL) in the database.

- See <http://www.php.net/manual/en/features.file-upload.postmethod.php> for more information on managing file uploads.
- b) Movie details page
- Save in the database that the user has viewed the movie.
 - If the user rates a movie and the data is good (valid), add it to the database.
- c) Watchlist page
- Only allow access to this page if the user has successfully logged in.
 - If the user creates a watchlist and the data is good (valid watchlist name), add the watchlist to the database.
- d) Watchlist detail page
- Only allow access to this page if the user has successfully logged in.
 - If the user deletes a movie from watchlist, ask the user confirmation and delete the movie from the Entries table in the database.
 - If the user wants to add a movie, use the movie ID and watchlist ID, and save the movie in a watchlist.

2. PHP Database Query

There are a number of pages that result in the database being queried. These pages are listed below, with an explanation of what is to be done for each.

- a) Login page
- Query the database with the login credentials to verify that the user exists and has provided the correct password.
 - If the information is correct, save the necessary information to know who this user is within a session variable, and redirect to the Home Page. Also, start the session.
 - If the login is incorrect, provide an error near the login form.
 - See the requirement in the previous assignment about saving in the database the fact that this user is logged in.
- b) Home page
- Query the database and load the top 15 rated movies on the webpage.
 - If the user clicks on the sort by "title" option, query the database and load the first 15 movies in alphabetical order.
 - If the user enters a text in the search bar and submits the query, load the webpage with the movies that match the title with the text. If no match found, display an appropriate message.
 - If the user clicks on any genre or origin, query the database and load the webpage matching that genre or origin.
 - If the user logs out, query the database to save the fact that the user logged out, destroy the session variable and terminate the session.

Hint: Use an input type="hidden" to store the ID of each movie. It will help you to load the movie detail page by querying the database based on the movie ID.

- c) Movie details page
 - Query the database using the movie ID and load the webpage.
- d) Watchlist page
 - Query the database and retrieve all the watchlists. Load the page with all the watchlists names.

Hint: Use an input type="hidden" to store the ID of each watchlist. It will help you to add a movie in a watchlist.

- e) Watchlist detail page
 - Query the database and load all the movies that are on the watchlist.

Grading Scheme

- 1 mark: Save data from signup form
- 1 mark: Save user's rating of a movie
- 1 mark: Save the newly created watchlist name
- 1 mark: Save a movie in a watchlist
- 1 mark: Dynamically displaying movies on the Home page (including origins and genres).
- 1 mark: Dynamically displaying movies based on search bar query.
- 1 mark: Dynamically displaying all the watchlists & displaying all the movies in a watchlist
- 1 mark: Dynamically displaying the movie detail page & saving the fact that the movie is viewed.
- 1 mark: Session management
- 1 mark: Correct redirections to the proper pages after form processing.

Submissions

All of the files for this assignment should be posted to your personal website on Hercules, as well as uploaded to UR Courses (a single zip file). A simple submission log file should be provided that includes your name, student number, class number, the URL of where you have posted the files, and a listing of the files you have submitted along with a short explanation of the purpose of each file. **You must also provide usernames and passwords of at least two users in the system, to be used for testing purposes. Failure to provide these support documents will result in delays in the grading of your assignment and possibly a deduction in your grade.**

Late submissions will not be accepted. If there are exceptional circumstances that kept you from submitting your assignment on-time, you should consult with your instructor as soon as you are able to do so. See the syllabus for more details on the late policy for this class.