

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

Assignment #6: Movie Database Website – AJAX Programming

Posted: Wednesday, November 27, 2019 at 6 PM

Due: Friday, December 6, 2019 by 11:55 PM

This is the last 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. In the second assignment, you implemented the client-side programming. In the third assignment, you designed and built the database. In the fourth assignment, you used PHP to implement the server-side programming. **In this last assignment, you will implement AJAX-based updating of information.** Because the assignments build upon each other, you may wish to make modifications to your previous assignment submission before starting this assignment.

There are three new pieces to add to your system that will take advantage of AJAX technology:

1. Dynamic search bar on the Home page.

Using the keydown or any appropriate JavaScript event, implement dynamic search on the homepage where the movies on the homepage dynamically change based on what the user has entered in the search bar. Use AJAX to request a list of movies, JSON as the data format, and JavaScript to process the data and manipulate the DOM to update the home page as needed.

2. AJAX sorting functionality.

Implement the sorting feature on the home page using AJAX. You can use events based on your design. For example, if you have buttons/hyperlinks for sorting, a click event would be suitable.

Use AJAX to request a list of sorted movies, JSON as the data format, and JavaScript to process the data and manipulate the DOM to update the home page as needed.

3. Dynamic “add to watchlist” functionality.

In the previous assignment, to add a movie, the user had to be redirected to the watchlist page and based on their selection, we added a movie to a particular watchlist. Now, using AJAX we can simplify this process.

Use AJAX to request a list of watchlists, JSON as the data format, and JavaScript to process the data and manipulate the DOM to update the home page as needed.

Optional:

On the home page, using AJAX, implement the “add to watchlist” functionality. When the user clicks on the add to watchlist button, a box should appear, which shows available watchlist names, and based on the user’s selection the movie will be added to the watchlist. Also, the “Add to watchlist” button should change to “Added to watchlist”.

Grading Scheme

This assignment will be graded out of 10 marks, based on the following criteria:

- 1 mark: Dynamic search request
- 1 mark: Dynamic search response in JSON format
- 1 mark: DOM manipulation of the movie list (for dynamic search)
- 1 mark: AJAX sorting request
- 1 mark: AJAX sorting response in JSON format
- 1 mark: DOM manipulation of the sorting response
- 1 mark: “Add to watchlist” AJAX request
- 1 mark: List of all watchlists as response in JSON format
- 2 mark: Movie added to watchlist

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, clas 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.