

Homework Assignment 9: Kevin Bacon

EXTRA FEATURES

The following are **extra features** you can optionally complete. The first extra feature you complete is worth **+1 extra point** on HW9; this can be used to make up for a -1 you might receive on some other part of the program. But you cannot get more than 100% on HW9, and the extra point cannot be applied to any other programs besides HW9. If you choose to complete more than one extra feature, each additional feature you complete is worth **+1 late day** (though HW9 is the last assignment, and a maximum of 2 late days can be used on it.) If you choose to do any extra features, in your program files' comment headers, indicate which one(s) you did.

Regardless of how many additions you write, the page behavior and appearance **should still work as specified**. If you have a different idea for an addition to the program, please ask us and we may approve it.

Extra Feature #1. Select actor from list

Once the user types the first/last name, if it matches more than one actor, let the user choose which one they meant. Use the all parameter to the web service previously described and present a list of possibilities, and let the user pick.

Extra Feature #2. Ajax `search.php` results

Change `search.php` into a service that spits out a partial HTML page containing just the two tables described previously. Contact it using Ajax rather than by a normal form submission, and when it sends back its HTML response, inject this into the main `mymdb.php` page. If you do this feature, a few appearance guidelines from the main spec ("same title/links", "link back to `mymdb.php`") no longer apply to `search.php` and should be ignored.

Extra Feature #3. Actor's career stats

Report information about the actor's career, such as their number of years they've been working in film (difference between first and most recent film), their average number of years between films, the percentage of their films in which they co-star with Kevin Bacon, and so on.

Extra Feature #4. Extended movie information

In addition to the movie info listed previously, also show the genre(s) and/or director name of each movie in which the actor appeared. You'll have to modify your SQL queries. Note that a movie can have more than 1 genre/director; modify your PHP code to show a **single row** for each film, containing all information for that film.

Extra Feature #5. Bling!

Add several Scriptaculous effects to your page to make it more awesome.

Extra Feature #6. Parameterize both actors

Our normal assignment lets you choose one actor to search for, but the other actor (Kevin Bacon) is fixed. For this feature, make it so that both actors are adjustable. The user types in two first/last names, and the page will show a list of all of each actor's movies, as well as all movies in which both actors appeared together.

If you do this feature, it's okay if each of the two actors requires a separate call to `actorid.php` to get the actor's unique ID. But otherwise you should have the same kinds of queries as described in the main spec. Use parameters in your `search.php` code to avoid redundancy between similar queries/code between the two actors.

Extra Feature #7. Web security

Modify your code to be secure against web security threats discussed in lecture. Encode every query parameter accepted by your PHP pages before outputting them in the page, to prevent HTML injection and cross-site scripting. Also encode any values passed to your pages that are to be passed to SQL queries, to prevent SQL injection attacks.

Extra Feature #8. Session/cookie data for last search

Use sessions and/or cookies as discussed in lecture to remember values that the user has entered into the page. For example, remember most recent actor's first/last name so that if the same user returns to the page later, those values will be automatically inserted into the input text boxes.