

# CS 328 - Homework 12

## Deadlines

Problem 2 -- your presentation of the final version of your `custom-session3.php` from Homework 11's Problem 5 -- is due **during lab on Friday, May 6**;

the remainder of this homework is due by **11:59 pm on Sunday, May 8, 2016**

## How to submit

Submit your files for this homework using `~st10/328submit` on nrs-projects, with a hw number of 12.

## Purpose

To practice lightly with Ajax, and to demonstrate/present your application using "your" additional database.

## Important notes

- **NOTE:** you are welcome to use `require_once` and `include_once` in your PHP documents! BUT when you use them in homework problems' documents, be sure to also SUBMIT copies of all files that you are requiring/including!
- Follow the **unobtrusive client-side JavaScript class coding standards** as discussed in class.
- Remember to follow the **CS 328 PHP Coding Standards**, as discussed in class and as given on the public course web site.
- Remember to follow the **CS 328 SQL and PL/SQL Coding Standards** as given in the CS 328 Homework 2 handout and the public course web site for all SQL and PL/SQL code.
- Make sure that you have executed the scripts `create-bks.sql` and `pop-bks.sql`.
- Remember to follow the **CS 328 HTML5 Coding Standards** as discussed in class and as given on the public course web site for all HTML5 documents.
- Remember to follow the **CS 328 CSS3 Coding Standards** as discussed in class and as given on the public course web site for all CSS3 that you write, also.

## Problem 1 - 30 points

You have seen, in class, a very simple example of Ajax in action.

To provide you with a very little bit of Ajax-related practice, modify Week 14 Lecture 2 `ajat-ex1.php` into a file with a name of your choice that includes `prob1` within it so that:

- its opening comment includes the URL that can be used to RUN this PHP
- the displayed page contains your name, visibly, somewhere in the `body` element
- the displayed page contains some HTML5 element(s) allowing the user to make a choice between at least three different options for some desired content (this can be radio buttons, a drop-down, three or more

"plain" buttons -- I am leaving it open).

- when the user's choice is made, it uses the `XMLHttpRequest` object to request what the user selected from the application tier, and modifies the page to somehow visibly display this chosen content (in some element BESIDES the current `textarea`).
  - (and if something goes wrong? report this where you had hoped to visibly display the chosen content)
- what can be requested?
  - It can be simple text content in files on the application tier, as in `ajax-ex1.txt`.
  - IF you would like, it can also be XML or JSON (BUT read Chapter 12's caveats on navigating the XML DOM, if you decide to try XML!)
  - It can even be something queried from a database, if you are feeling daring! BUT that is NOT required for this homework problem.

Submit your resulting file `*probl*.php` and any other files it needs (e.g., required footer files, for example).

## Problem 2 - 70 points

This problem is to present/demonstrate the final version of your `custom-session3.php` from Homework 11 - Problem 5 in-lab on Friday, May 6; your Week 15 Lab Exercise will also be partially determined by this demonstration.

NOTE: the version you present/demonstrate can certainly be the version you submitted for Homework 11. BUT if you WANT to add some additional unobtrusive JavaScript or some Ajax to this, or to try out a feature you've learned about from one of the previous two presentations, you CAN. Just make sure you have something operational at the beginning of Friday's lab to present!

Taking this presentation in a \*bit\*-more-formal of a direction: During this presentation/demonstration, you are expected to:

- Speak clearly, not too quickly, and project (speak loudly toward the audience) -- and, note that it is good to look up at the audience every once in a while.
  - Also: try to increase the font size in your browser so that the audience can see your screens' text. They have occasionally been too small during some previous presentations.
- Start out your demonstration/presentation with a very brief (1-2 sentences) description of your "additional" database's scenario.
  - ("This is an application for Betty Boop's Bakery, which specializes in Boston's best blintzes!")
- Briefly summarize what your application does.
  - ("This allows customers to request a list of the blintzes-of-the-day for a specified date, or to ask for a list of all of the types of blintzes they have ever ordered, or to order a blintz.)
  - ("This allows the baker on shift to bring up the ingredients for a specified type of blintz, or to see all of today's blintz orders, or to see which blintzes include a specified ingredient.)
- Demonstrate a successful (if possible) example of **each** option in your application, **explaining** what the user does as you demonstrate it.
  - ("The baker on shift selects the desired recipe from this drop down..." (select a recipe), " ...and when

they click submit..." (click submit), "...a listing of the ingredients for the selected blintz is shown" (and point out the now-displayed ingredients).)

- Decide on some an aspect of your application that you are particularly pleased with (some aspect of its design, or how you used something in PL/SQL or PHP or HTML5 or CSS or JavaScript, for example; OR it could be something you've learned about in one of the previous two sets of demonstrations/presentations!)

THEN make a point, sometime during your presentation, to explicitly MENTION that, such that I cannot miss it.

- ("Something I am particularly pleased with is how I used a bind variable for the customer's name in my dynamic SQL query in PHP to avoid SQL injection.")
- ("I am particularly pleased with the unobtrusive JavaScript used to bring up this especially-clear feedback if the user does X wrong.")
- ("The placeholder attributes in this form, mentioned during the pizza design demos, are something I'm particularly pleased with.")
- It is also a good idea to practice **ENDING** a presentation/demonstration -- in general, it should not peter out, with the listeners wondering "Are they done...?"

SO -- that's an additional requirement this time:

- You want a definite conclusion -- a concluding statement is ideal ("This provides a good foundation for future applications for Betty Boop's Bakery!"),
- but at least make it clear you are done. ("Any questions?", said in a definite, concluding tone)

Would it be a good idea to practice your presentation/demonstration before Friday? Definitely. 8 - )

I have very much enjoyed your first two presentations/demonstrations -- and these, building on your experience from those and using the "additional" database you chose, should be even more interesting.

For Homework 12, submit **all** of your files for your demonstrated/presented application (although it IS OK to fix bugs between the presentations and Sunday's deadline as needed); MAKE SURE you include the CORRECT URL for running your demonstrated/completed application in `custom-session3.php`.