CSCI 452/553: Network and Web Programming

Ajax/XML/JSON Assignment

Due April 23rd, 11:59:59 PM

- All development must be done with Github. Specifically, there must be at least one commit for every ten (or fewer) lines of code (excluding empty lines and lines with only comment). With each commit, the log must explain the purpose of the added/changed code. The Github repo must remain private before the deadline and public after the deadline.
- Submit a single plain text file named repo.txt at http://hucs.dynu.net/lij/courses/submit_hw.html
 The text file should include only the URL of your Github repo.
- Grading

All or significant portion of the points will be deducted at the discretion of the instructor if any of the above requirements are not met. Plagiarism will always lead to zero credit for this assignment and potentially for the whole course. No credits will be given if the repo is modified after the deadline. Other than that, the points will be given based on the correctness.

In this project, you are asked to write the web pages and programs to support the following operations.

• When the web page at books.php is first opened, the javascript program books.js included in the web page fetches the list of book categories via Ajax from booklist.php and displays it as in the following example.

○ Children ○ Computers ○ Finance List Books

• When the "List Books" is clicked, the javascript program books.js fetches the information of the books in the selected categories via Ajax from booklist.php and displays it as in the following example.

Books in category "Cooking":

- ❖ Breakfast for Dinner, by Amanda Camp (2009)
- 21 Burgers for the 21st Century, by Stuart Reges (2010)
- The Four Food Groups of Chocolate, by Victoria Kirst (2005)

If books.php is accessed with the parameter "format" set to "json", i.e. the path part of the URL is books.php?format=json, the web server should send back data in JSON in all the following communication. Otherwise, the web server should send back data in XML.

The book information on the server must be stored in a MySQL database. There should be 5 tables, one for title, year, price, category and author respectively. (You will create dummy book information to store in the database.)

Your repo must include the following files:

- books.php
- booklist.php
- books.js
- db.sql (The database in plain text exported from MySQL. It should include both the structure and the data.)
- Other files (e.g. CSS files) needed for your web site to function.
- A plain text file named readme.md that contains the instructions to set up your web site from scratch. If any site-specific parameters need be changed in order for your web site to work, make sure the explanation is included in the instructions.