WEBD 236 Homework 1

Answer the following questions based on your reading of the text book, any supplemental material, and the instructor's presentation this week. If you use an external source (i.e. a web-page, the required textbook, or an additional book) to help you answer the questions, be sure to cite that source. You should probably always be citing a source.

Short answer

1. **[3 points]** In a web application, how is the execution of JavaScript fundamentally different than PHP?

2. **[4 points]** List and explain the steps in the request/response cycle in a PHP application that accesses a database.

3. **[3 points]** How are the GET and POST methods of a web form different in how data is transmitted to the server?

4. **[3 points]** How are single-quote strings different from double-quote strings in PHP?

Programming

5. **[12 points]** Write a solution to the "FizzBuzz" problem. The FizzBuzz problem is a classic programming interview problem in which a range of numbers is examined to locate those numbers divisible by 3 and 5. If the number is divisible by 3, then print "Fizz." If the number is divisible by 5 then print "Buzz." If it is divisible by both, then print "FizzBuzz." Otherwise, just print the number.

   You should have an `index.html` file and a `fizzbuzz.php` file. The `index.html` has a form that submits data to the `fizzbuzz.php` file. You may optionally have a style file as well, referenced from both. If the user does not submit a start and stop number for the range (inclusive), then assume that start is 1 and stop is 100. Otherwise, use the specified range.

   You may use either GET or POST for your form processing. Screen shots of one sample solution are below. You should try to get your solution to look as close to this output as possible.

FizzBuzz

Author: Todd Whittaker

This program will solve the classic "FizzBuzz" problem posed in many programming interviews. The idea is to examine all the numbers between *start* and *stop*. If the number is divisible by 3, then print "Fizz." If the number is divisible by 5 then print "Buzz." If it is divisible by both, then print "FizzBuzz." Otherwise, just print the number.

Input your data

Starting number: 30

Stopping number: 50

Submit

Figure 1: The index.html file with sample inputs.

FizzBuzz between 30 and 50

FizzBuzz
31
32
Fizz
34
Buzz
Fizz
37
38
Fizz
Buzz
41
Fizz
43
44
FizzBuzz
46
47
Fizz
49
Buzz

Return to FizzBuzz

Figure 2: Output from the fizzbuzz.php file.

Submission instructions

Create a Word document with your solution to the short answer questions. Create a ZIP file containing your project directory for the solution to the programming problem. The ZIP file should minimally contain the files index.php and fizzbuzz.php. Follow proper coding conventions (indentation, commenting, etc.) that you would have learned in previous courses.

Submit both the Word document and the ZIP file to the dropbox for the course.