

SOEN287 – Summer 2019

Assignment #3

Due Date: By 11:59 PM **August 11th**, 2019

Evaluation: 11% of final mark (see marking rubric at the end of handout)

Late Submission: none accepted

Purpose: To obtain a solid understanding of server-side scripting and how it can be used to build dynamic content and real-world applications.

CEAB/CIPS Attributes: This assignment mainly evaluates use of PHP, HTML, and dynamic content with PHP. (Knowledge-base and use of engineering tools).

General Guidelines When Writing Programs:


- Include the following comments at the top of your source codes

```
// -----  
// Assignment (include number)  
// Written by: (include your name (s) and student id(s))  
// For SOEN 287 Section (your section) – Summer 2019  
// -----
```

- In a comment, give a general explanation of what your program does.
- Include comments in your program describing key steps in your program
- Display clear prompts for users when you are expecting the user to enter data from the keyboard.
- All output should be displayed with clear messages and in an easy to read format.

Question #1

Write a PHP page for registration functionality. A sample registration page is depicted in figure 1. You may choose a different layout and/or formatting for this page. Validation must be done for all of the fields on this page with checks such as non empty name, an email from Gmail or Hotmail, username satisfying the naming conventions of PHP variables. The password must contain at least 1 uppercase character, 1 lowercase character, 1 digit, 1 special character and a minimum length of 8 characters. Both passwords must match in case sensitive manner. You must use “POST” method to submit the user data and you must use appropriate input type and also use placeholders. A file named process.php will collect the data from registration page.



Sign Up

Full Name
Name_

Email
Email address_

Username
Username_

Password

Repeat Password

☐ I agree to the Terms of User

[Sign Up](#) [Sign in →](#)

Figure 1. Sample registration page from colorlib.com

Question #2

Continuing from the previous question, collect data from registration page and validate if this username can be registered using a text file. You may assume that there exists a file named “users.txt” at the source location which contains a set of usernames. Format of the data is up to you (you can use one username per line or multiple separated by space on the same line). You should use the

file functionalities to make sure that this file exists, and read the file to verify username doesn't currently exist. If the username exists, you should reload the registration page or show the current page *i.e.* “process.php”. Start the session if successful and set a session variable.

Question #3

Create a display page “display.php” that contains a select box, a slider, a color picker, and a checkbox control. These controls should set the values in session variables and should be used in a PHP file titled “display.php”. “process.php” will work as a styling control for “display.php”. The select box should control which control to stylize, color picker will decide upon the color value, slider will decide upon the font size and checkbox will decide upon the visibility. A sample layout of “display.php” is depicted in Figure 2. You could choose a different layout as long as all the functionalities from “process.php” are justified.

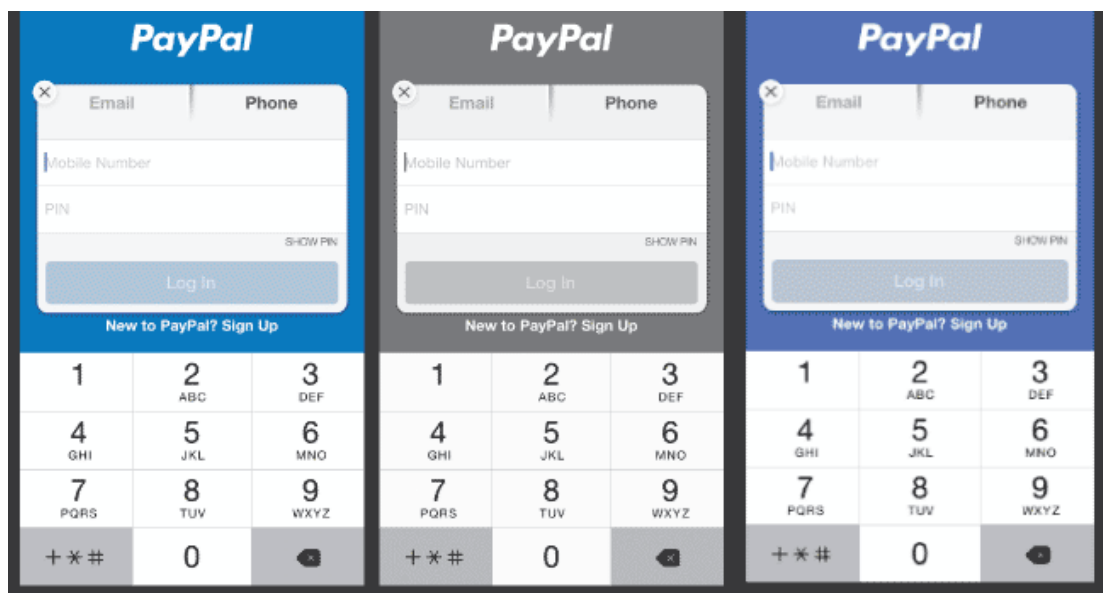


Figure 2. Various styles for a given form (courtesy www.smashingmagazine.com)

Question #4

Write functionality to create a cookie variable for storing information related to page visits. The variable should be a counter that increases its value each time “display.php” loads. The cookie should however have a lifetime of only 1 minute after which it will be unset and counter should again start from 0. You will also have to display the countdown timer on this page for 1 minute which will then terminate with a message saying “The cookies have been deleted.”

Submitting Assignment #3

- Zip source code (HTML, JavaScript, CSS and PHP files) of this assignment.
- Naming convention for zip file: Create one zip file, containing all source code files for your assignment using the following naming convention:
- The assignment is to be **done individually**:
- The zip file should be named a#_studentID, where # is assignment number studentID is your student ID number. For example, for third assignment, student 123456 would submit a3_123456.zip
- For submission please use Moodle link available in the week of August 9th.
- Assignments not submitted to the correct location or not in the requested format will not be graded.
- Submit only ONE version of an assignment. If more than one version is submitted the last one will be graded and all others will be disregarded.

Evaluation Criteria of Assignment #3 (11 points)

HTML Document with JavaScript source code	
Question #1 (3 pts.)	
HTML form	1.0 pt.
Fields Validation	1.5 pt.
POST method data transfer	0.5 pt.
Question #2 (2.5 pts.)	
File check	0.5 pt.
User authentication	1.0 pt.
Post authentication processing	1.0 pt.
Question #3 (4 pts.)	
process.php	1.0 pt.
display.php	1.0 pt.
Session variables	1.0 pt.
Question #4 (1.5 pts.)	
Number of visits counter	1.0 pt.
Counter reset using cookie expiry	0.5 pt.
Countdown timer to be displayed	1.0 pt.