

SOEN287 – Fall 2020

Assignment #3

Due Date: By 11:59 PM **December 3rd**, 2020

Evaluation: 15% 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:

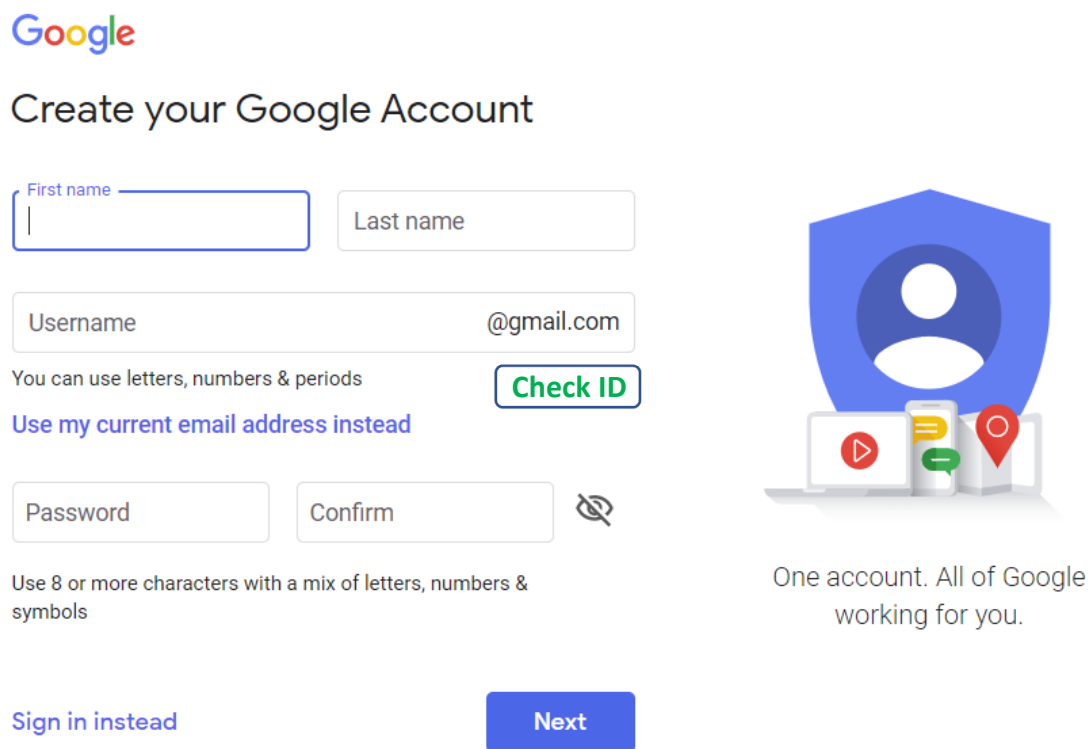
- Include the following comments at the top of your source codes

```
// -----  
// Assignment (include number)  
// Written by: (include your name (s) and student id(s))  
// For SOEN 287 Section (your section) – Fall 2020  
// -----
```

- In a comment, give a general explanation of what your program does.
- Include comments 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 as well as in an easy to read format.

Question #1

Write a PHP page to replicate Gmail sign up page with an old twist. A sample sign up page is depicted in Figure 1. You may choose a slightly different layout and/or formatting for this page. Validation must be done for all the fields on this page with checks such as non-empty name, a valid userID satisfying the naming conventions of PHP variables. The password must contain at least two uppercase characters, 1 lowercase character, 1 special character from {!, @, #, \$, %, ^, &}, 1 digit and a minimum length of 8 characters. Both the 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 must provide placeholders. A file named process.php will collect the data from this registration page.



Google

Create your Google Account

First name

Last name

Username @gmail.com

You can use letters, numbers & periods

[Check ID](#)

[Use my current email address instead](#)

Password

Confirm

Use 8 or more characters with a mix of letters, numbers & symbols

[Sign in instead](#)

[Next](#)

One account. All of Google working for you.

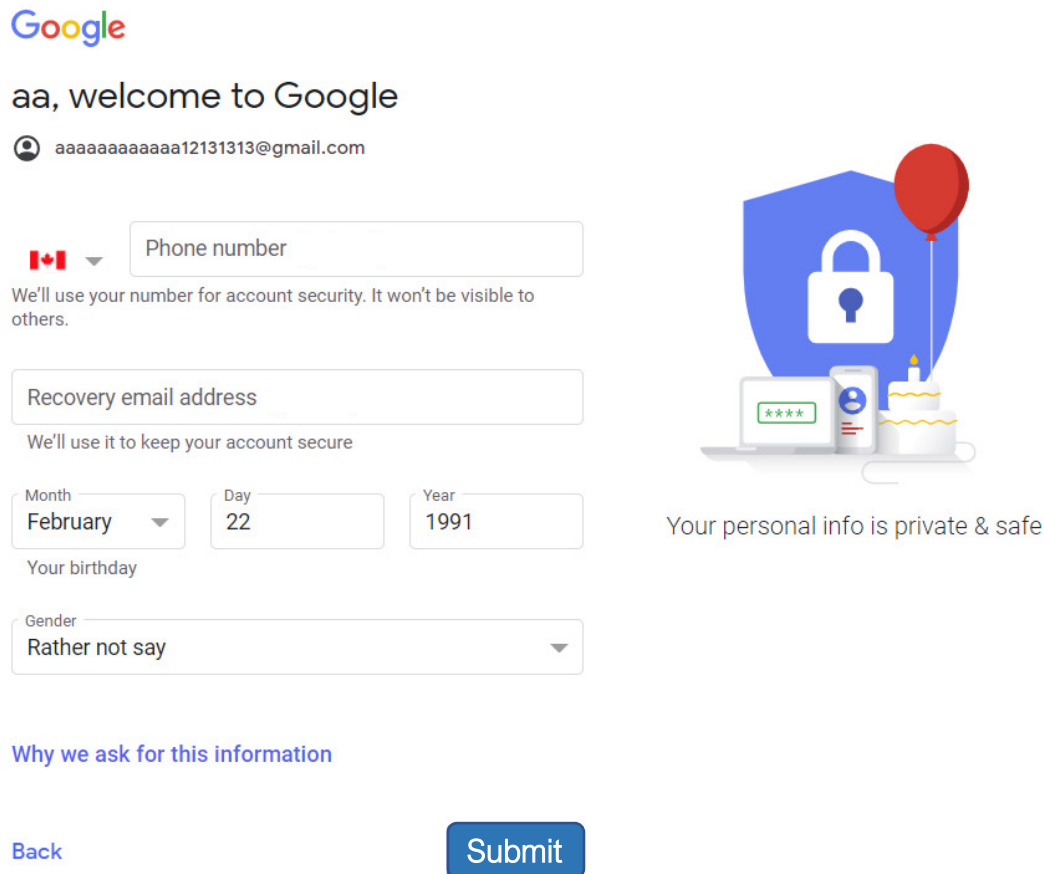
Figure 1. Sample registration page from Gmail.com

Question #2

In the registration page from the previous question, provide functionality for the “Check ID” button. This button must use the userID provided on the registration form and validate if this userID can be registered based on the data available in a text file. You may assume, a file named “users.txt” exists at the source location which contains a set of userIDs. You must have one userID per line with all the relevant information separated by a space. You must use PHP file functionalities to make sure that this file exists and then read the file to confirm that this userID does not currently exist. If it does, you must reload the registration page with all the user entered information, reset the userID field and set the focus on it. If the userID does not exist, reload registration page with the user entered information and print a message, “this userID is available”.

Question #3

Create the “process.php” file which will collect data from registration page using the POST method. This page will request further data about phone number, date of birth, recovery email, gender, *etc.* Upon filling out all the required information, and clicking the submit button, data must be transferred to “outcome.php”. This page will append the user information to “users.txt” file and output a message “User account has been created successfully.”



The image shows a Google account creation page. At the top, it says "Google" in its multi-colored font, followed by "aa, welcome to Google". Below this is a profile icon and the email address "aaaaaaaaaaaa12131313@gmail.com". There is a Canadian flag icon and a "Phone number" input field with a note: "We'll use your number for account security. It won't be visible to others." Below that is a "Recovery email address" input field with a note: "We'll use it to keep your account secure". The birthday section has three input fields: "Month" (February), "Day" (22), and "Year" (1991), with a note "Your birthday". The gender section has a dropdown menu set to "Rather not say". On the right side, there is an illustration of a blue shield with a white padlock, a red balloon, a laptop showing "****", a smartphone, and a birthday cake. Below the illustration, it says "Your personal info is private & safe". At the bottom, there is a "Back" link and a blue "Submit" button. A link "Why we ask for this information" is also present.

Figure 2. Sample process.php file

Question #4

In “outcome.php”, create a mailing functionality using the PHPMailer template provided with this assignment (available under the assignment submission link). An email, with a successful account creation message, must be sent to the user on the alternate email provided. Highlighted parts of the message below must be replaced with appropriate values and a welcome image must be attached.

Dear **FirstName LastName**,

An account has been successfully created for you with userID “**USER’SID**”.

Best regards,
Gmail Administrator

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
- Please use Moodle link available in the week of December 3rd for submission.
- Assignments not submitted to the correct location or not in the requested format will not be graded.
- Submit only ONE version of the 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 (15 points)

HTML Document with JavaScript source code	
Question #1 (4 pts.)	
HTML form	2.0 pt.
Fields Validation	1.5 pt.
POST method data transfer	0.5 pt.
Question #2 (4 pts.)	
File check	1.0 pt.
User authentication	1.0 pt.
Post authentication processing	2.0 pts.
Question #3 (4 pts.)	
process.php	2.0 pt.
outcome.php	0.5 pt.
File manipulation	1.5 pt.
Question #4 (3 pts.)	
Integrate the PHP Mailer functionality	1.0 pt.
Prepare the custom message	1.0 pt.
Send email with the welcome image	1.0 pt.