PHP: PASSING VARIABLES TO A SCRIPT

1 Remember how to use the PHP + SQL server you installed

1.1 Using WAMP (Windows Apache MySQL PHP)

- Put any PHP file you want to test into `C:/wamp64/www/`, e.g. http://www.barsamian.am/2021-2022/S7ICTA/TP6_Exo1.php (or any other script).

- Make sure wampserver is running and has opened a local PHP server.

- Open your browser and type `http://localhost/TP6_Exo1.php` (or the name of your script).

1.2 Using MAMP (Mac Apache MySQL PHP)

- Put any PHP file you want to test into `/Applications/MAMP/htdocs/`, e.g. http://www.barsamian.am/2021-2022/S7ICTA/TP6_Exo1.php (or any other script).

- Make sure MAMP is running and has opened a local PHP server.

- Open your browser and type `http://localhost/TP6_Exo1.php` (or the name of your script).

2 Exercises

Let's have a look at the "Inches to Centimeters Converter" from last week, see Listing 1. It is not really interesting to host such a webpage: it is not at all dynamic! All it does is printing the diagonal length of a 14-inches screen, in centimeters. Let us at least be able to choose the size of the screen (in inches)!

```
1  <!DOCTYPE html>
2  <html>
3  <head>
4      <title>Inches to Centimeters Converter</title>
5  </head>
6  <body>
7      <?php
8      // One inch is 2.54 cm.
9      $one_inch = 2.54;
10     // My screen has a size of 14 inches.
11     $size_in_inches = 14;
12     // Perform conversion and display result.
13     $size_in_cms = $size_in_inches * $one_inch;
14     echo "<p>Your screen measures $size_in_cms centimeters.";
15     ?>
16 </body>
17 </html>
```

Listing 1: Static PHP code — From work 6

This week, we'll see two ways of doing this.

Exercise 1   Computer: ✓

   The PHP script in Listing 2 reads your screen size from the url that you use to open it. Download the script from http://www.barsamian.am/2021-2022/S7ICTA/TP7_Get.php and run it with `http://localhost/TP7_Get.php?size=15`[1]. Or run it directly from my website, and add `?size=15` at the end. Modify the size value that you "pass" to the script.

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[1] You may type just `http://localhost/TP7_Get?size=15`.

```
 1  <!DOCTYPE html>
 2  <html>
 3  <head>
 4      <title>Inches to Centimeters Converter</title>
 5  </head>
 6  <body>
 7      <?php
 8      $one_inch = 2.54;
 9      $size_in_inches = $_GET['size'];
10      $size_in_cms = $size_in_inches * $one_inch;
11      echo "<p>Your screen measures $size_in_cms centimeters.";
12      ?>
13  </body>
14  </html>
```

Listing 2: Dynamic PHP code, GET method (without form)

Exercise 2   Computer: ✓

Another solution is to create a first page that asks the size value (through a form) and to catch this value with PHP code. This can be done thanks to the GET method, as before, but having everything in the url is not always a good idea. To avoid using the url, there is the POST method. The PHP script in Listing 3 asks for a screen size and the one in Listing 4 catches this value to do exactly the same thing as before.

Download scripts from http://www.barsamian.am/2021-2022/S7ICTA/TP7_Form.html and http://www.barsamian.am/2021-2022/S7ICTA/TP7_Post.php, then run them by typing the url http://localhost/TP7_Form.html. Or run it directly from my website. Modify the size value that you "pass" to the script. Notice that the first page is pure HTML, we just need PHP to manipulate the value from the form, not to send it thanks to the form.

```
 1  <!DOCTYPE html>
 2  <html>
 3  <head>
 4      <title>Inches to Centimeters Converter</title>
 5  </head>
 6  <body>
 7      <form method=post action="TP7_Post">
 8        <h1>Submit your screen size</h1>
 9        <p>Size (in inches): <input type="text" name="size" required>
10        <p><button type="submit">Submit</button>
11      </form>
12  </body>
13  </html>
```

Listing 3: Dynamic PHP code, POST method (form)

```
 1  <!DOCTYPE html>
 2  <html>
 3  <head>
 4      <title>Inches to Centimeters Converter</title>
 5  </head>
 6  <body>
 7      <?php
 8      $one_inch = 2.54;
 9      $size_in_inches = $_POST['size'];
10      $size_in_cms = $size_in_inches * $one_inch;
11      echo "<p>Your screen measures $size_in_cms centimeters.";
12      ?>
13  </body>
14  </html>
```

Listing 4: Dynamic PHP code, POST method (to catch the value from Listing 3, this webpage must be named TP7_Post.php)

Exercise 3   Computer: ✓

The goal of this exercise is to create a webpage that asks the user for a number (through a form with POST method), and a second webpage, that takes this number and checks whether the number that was given is an even or an odd number (and prints a message telling whether the number — that has to be printed — is an odd or an even number).

Remark 1: When a form contains a text input, it is not mandatory to add a "Submit" button. Pressing enter inside this input will submit the form anyway.

Remark 2: In fact, it is possible to pass the values to the same webpage, but it requires a more convoluted code, so we won't get into these details.

Exercise 4   Computer: ✓

You are in charge of organizing the wedding of your best friend. Here's the thing: a lot of people that your friend invited cannot see each other, and you have to make the best table plan. Ever.

Here are the rules for a happy wedding, given that each table can accommodate for at most 8 persons:

- Table 1 is for kids (age < 14)

- Table 2 is for the elders (age > 80)

- Table 3–6 are for everybody else (26 more people, and for some mysterious reason, each of those 26 people have a first name that begins with a different letter! How convenient to automate the process, you'll agree with me!), with the following sub-rules:

    ◇ A... hates B....
    ◇ C... and D... would like to chat together.
    ◇ E... wants a table with less persons.
    ◇ F... and G... want table 9. Wait... what?
    ◇ R... hates Z....
    ◇ Oh, and by the way, your friend likes tables with a prime number of people on it. Just so you know.

Create a webpage that asks the user for a first name, an age (through a form with GET or POST method), and a second webpage, that takes this name and this age and outputs the table number where this person should be seated.