

Lab 6 – Logical and Conditional Statements

Purpose

- Solve problems using logical and conditional statements of PHP
- Upload your website to a Web server

Due Date

- This lab must be handed in:
Friday June 25, 2021 – before midnight

Assessment

- This Lab is worth 2% of your total course mark.

Assigned Readings

The following chapters of **Fundamentals of Web Development** will be useful in completing this exercise:

- Chapter 4
- Chapter 8

Lab Supplies

To complete this lab you will require the following lab supplies:

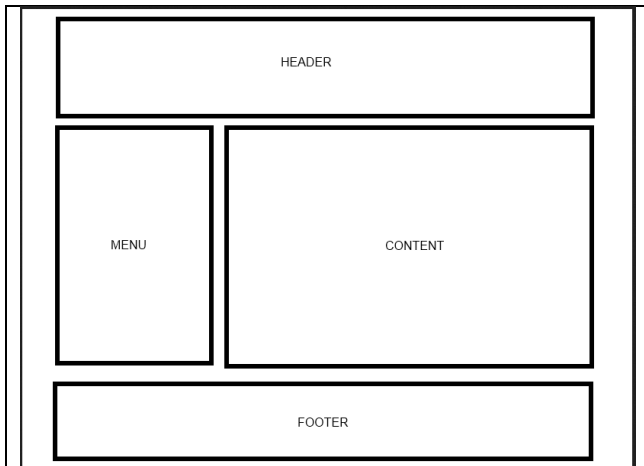
- Textbook: **Fundamentals of Web Development** by Randy Connolly and Ricardo Hoar
- EasyPHP, or other WAMP server
- Eclipse, Notepad++ (or other text editor, or IDE)

Summary of Tasks

1. Develop the logic to solve and display the output for ChessBoard.php.
2. Develop the logic to solve and display the output for Prime.php.
3. Develop the logic to draw a specific pattern for Pattern.php.
4. Upload your website to the webserver
5. View your webpage using a web browser
6. Submit Lab Link on Brightspace
7. Submit source code of all PHP files on Brightspace

Task 1

Implement the following Design Pattern to create a 'Common Look and Feel' to be used on every page of your website.



Your web site will include the following PHP scripts:

- Header.php
- Footer.php
- Menu.php
- ChessBoard.php
- Prime.php
- Pattern.php

Header.php

Header.php must contain a script to display a Common Header that will appear on every page. The header must display Program Name and Course Name

Footer.php

Footer.php must contain a script to display a Common Footer that will appear on every page. The footer must contain Student Number, First Name, Last Name, Email Address

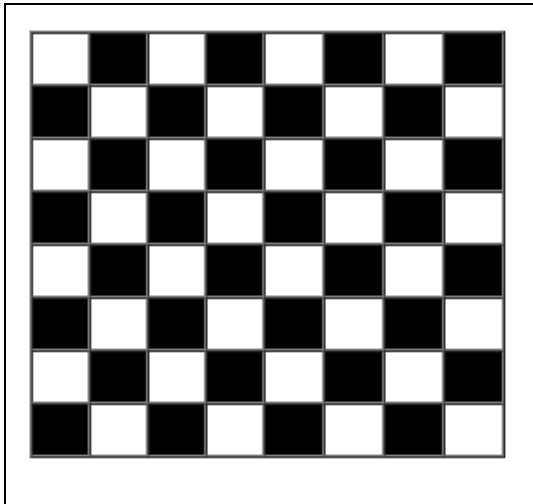
Menu.php

Menu.php must contain a script to display a Common Menu to be shown on every page. The menu must contain links to **ChessBoard.php**, **Prime.php** and **Pattern.php**

ChessBoard.php

In ChessBoard.php, you need to create a script that will draw a chess board using logical and conditional statements of PHP.

Expected output is below:



Also use the PHP statement 'include' to add your Header, Menu and Footer to the page.

Prime.php

In Prime.php, you need to create a script that will generate all prime numbers in between a range (Range 1 and Range 2) inputted from the user prompt.

For example, if Range 1= 50 and Range 2=100, you have to display all the prime numbers in between 50 and 100 by clicking 'Generate' button.

You must implement it using **HTML form elements** as well as **the Logical and Conditional statements** of PHP. Also use the PHP statement 'include' to add your Header, Menu and Footer to the page.

Example of sample output is below:

Range 1: 50	Range 2: 100	Generate
<div>53 is a prime number 59 is a prime number 61 is a prime number 67 is a prime number 71 is a prime number 73 is a prime number 79 is a prime number 83 is a prime number 89 is a prime number 97 is a prime number</div>		

Hints for Prime.php:

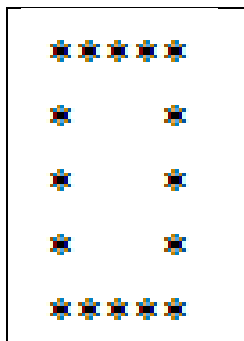
Range 1 and Range 2 values must be inputted from the user prompt.

You can use any standard algorithm for determining a prime number. An efficient algorithm is as follows:

```
START
prime = true
index = 2
WHILE ((index * index) <= num) AND prime EQUAL true
    IF (num MOD index) = 0
        prime = false
    ENDIF
    index = index + 1
ENDWHILE
IF prime = true
    then num is a prime number
ENDIF
END
```

Pattern.php

Use conditional loop (for/while/do...while) statement of PHP to draw the following pattern. Also use the PHP statement 'include' to add your Header, Menu and Footer to the page.



Note: Please make sure that the header, footer, and menu are distinguishable with respect to the body (main content) of the web page.

Task 2

Create Lab 6 submission folder '**Lab6**' and copy **ChessBoard.php**, **Prime.php** and **Pattern.php** and any other required files (e.g. **css file**) into this folder.

Task 3

Upload your websites for Lab 6 into a Web Hosting Server by uploading '**Lab6**' folder inside the 'public_html' directory of 'SiteGround' Web Hosting domain using DashBoard.

The 'File Upload' instruction is posted on Brightspace ([Course Contents -> Module 1 -> Part 2 -> SiteGround_FileUpload_Instruction.docx](#)).

Task 4

View your websites for Lab 6 using a web browser. Open a web browser and navigate to the following web address:

`http://your_web-hosting_domain_name/Lab6/<filename>`

For example, the sample URL for Lab 6 on an arbitrary web hosting domain is:

rejaulc.sgedu.site/Lab6/Prime.php

where '[rejaulc.sgedu.site](#)' is the name of an arbitrary web hosting domain, '[Lab6](#)' is the submission folder for Lab 6, '[Prime.php](#)' is the homepage of Lab 6.

Task 5

Once you have confirmed that your webpage is available online, you are ready to hand in your lab.

Create a compressed file (Lab6.zip) which will contain the following PHP files:

- Header.php
- Footer.php
- Menu.php
- ChessBoard.php
- Prime.php
- Pattern.php

Create a word document (Lab6.doc) in which write the following Information:

- Student Number
- First Name
- Last Name
- The URL, or hyperlink of the home page (index.php) of Lab 6

To hand in your lab go to Brightspace and navigate to *Course Content* → *Labs* and click on '*Lab 6 - Logical and Conditional Statements*' link.

Upload the word document (**Lab6.doc**) and the compressed file (**Lab6.zip**) on Brightspace.

Finally, click the 'Submit' button to send the lab to your professor.

IMPORTANT NOTE: If the URL, or hyperlink, does not direct the professor to the lab you will receive a ZERO for the lab assignment.

IMPORTANT NOTE:

If you do not upload either Lab6.zip or Lab6.doc on Brightspace, you will receive a ZERO for the lab assignment.