

Ch10 - PHP Crash Course

Introduction

Chapter 1 covers a lot of ground, fortunately a good chunk of this is review material from CIS 115; however some new concepts are introduced. For this section of the assignment you will work in your local, development environment.

Objectives

- Create a folder structure
- Create a small PHP program
- Create an index.php file

Assignment

Folder structure

- Inside your **xampp\htdocs** folder create a new folder named **web182** if you haven't already done so.
- Inside of that folder, create a new folder named **ch01** (**xampp\htdocs\web182\ch01**)
- All of the material from the following exercises should be stored in this folder.
- Create another folder inside your **web182** folder and name it **templates** (**xampp\htdocs\web182\templates**)
- You will create the same structure on your web host in the upload section in Moodle.

HTML5 Template

- Create a new file named **html5-template.php** (use .php as we will start putting php code in the template in the future.)
- You can create your own valid HTML5 file or use the code from below.
- Save the file so you can reuse it again. We will explore using templating systems later in the class so you don't have to reinvent the wheel. For now you can just copy and paste.

```
<!doctype html>

<html lang="en">
<head>
  <meta charset="utf-8">
```

```
<title>HTML5 Template</title>
</head>
<body>

</body>
</html>
```

Firkins and a `for` Loop

(15 points)

This is similar to the temperature conversion exercise you completed in CIS 115.

[An American firkin](#) is a unit of measurement. 1 firkin = 9 gallons.

Create a file named **firkin-for-loop.php** (no HTML file necessary)

- Write an HTML level **<h1>** header that displays American Firkin Convertor
- Write a for loop that starts at 1 and goes to 10 (inclusive) that displays the number of firkins and it's corresponding number of gallons.
- Your output should be in an HTML table that has headers firkins and gallons.

Firkin Converter

The objective of this exercise is to build a firkin convertor. You are required to build, in small steps, the steps covered from chapter 1. Before getting into the programming, read the top section of this [Wikipedia link about the three different types of firkins](#).

Concatenate strings

(15 points)

- Create a file named **firkin.php**
 - Copy and paste your HTML5 template.
 - This file will ask the user for their first and last name using an HTML form.
- Create a file named **firkin.view.php**
- This file will
 - Also contain valid HTML5 from your template.
 - Receive a first and last name of the person using the program.
 - Display a heading, **Firkins** with an **<h1>** tag.
 - Display the user's first and last name.

Check for an empty name

(15 points)

- Still using **firkin.php** file , add an **if** statement that checks to make sure the user enters both a first and last name.
- Use the PHP function [strlen\(\)](#) to test if the data entered by the user has a string length greater than zero
- Displays an error if they did not enter at least one character in the first and last name boxes.
- Displays the heading, Firkins with an **<h1>** tag.
- Display the user's first and last name using **<p>** tags.

Add a firkin selector

(15 points)

Continue building upon what you have already created in your **firkin.php** file. Add a **drop-down** list that allows the user to select from the following types of firkins.

- American unit of dry measure
- British unit for butter and cheese
- British unit of volume for beer

Next update your **firkin.view.php** file so that it receives the user's selection and displays the selection after the user's first and last name. Provided there is no error it should display

- The heading, Firkins with an **<h1>** tag.
- The user's first and last name using **<p>** tags.
- The type of firkin the user selected.
- For example, "June Cleaver you selected an American firkin measurement".

Add the number of units

(15 points)

- Continue building upon what you have already created.
- Add a new drop-down list to your **firkin.php** file that shows integer values from 1 to 20 (inclusive).
- Use a **for loop** to create the drop-down list.
- Add additional code in your **firkin.view.php** file that uses the following formulas depending upon what type of firkin the user selected.
- American unit of dry measure
 - 1 firkin = 9 gallons
- British unit for butter and cheese
 - 1 firkin = 56 pounds
- British unit of volume for beer
 - 1 firkin = 9 imperial gallons (you may ignore the reference to the (.25 barrel).

Date

(10 points)

Add the [date\(\)](#) function to the bottom of your code as it is shown in the book. The date should automatically display the today's days.

Create some test data to make sure your program is working according to the requirements.

Submit Your Work

When you are finished

- Zip up the contents of the folder
- Name the folder ch01-yourLastName.zip
- Check that it unzips correctly.
- Submit the zipped folder in Moodle.