

**Concordia University**  
**SOEN 287: Web Programming 1 – Fall 2016**  
**Assignment 4**

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**Due Date:** By 11:55pm, Dec 6, 2016

**Evaluation:** 6% of final mark

**Late Submission:** none accepted

**Type:** Individual Assignment

**Purpose:** The purpose of this assignment is to have you to practice HTML, CSS, JS, PHP and create a website

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## **Exercise 1**

The following short questions will focus on getting you familiar with how to write PHP functions as well as how to make use of the pre-existing PHP functions. All your PHP functions must be declared in the document body section and each functions name must be as specified below. To demonstrate the functionality of each method, you must make function calls in the document body. Include a heading (h1 ... h6) that indicates the function is being tested before the function demonstration. The use of Global Variables is forbidden!

**A) Function:** splitSort

Parameter(s): String

Description: Given the string, place each word into an array index and sort it alphabetically before returning the filled array.

**B) Function:** uppercaseFirstandLast

Parameter(s): String

Description: For each word in the input string, capitalize (uppercase) both the first letter and the last letter and return the modified string.

**C) Function:** findAverage\_and\_Median

Parameter: An array of numbers.

Description: Calculate the average and median of the numbers and return both values.

## **Exercise 2**

Create a php page (name it numOfVisits.php) that uses cookies to record and track the number of times a webpage has been visited. If the visitor is looking at the webpage for the first time, it should display the following message: **Welcome to my webpage! It is your first time that you are here.** If the page has been visited more than once, display: Hello, this is the ## time that you are visiting my webpage (where ## shows the number of visits). In this case you should also display a message that shows the day of the week,

date, time and the time zone on your server that the page was visited last time in the following format (as an example):

**Last time you visited my webpage on: Sun Mar 20 17:16:18 EST 2016**

(EST= Eastern Standard Time Zone)

### Exercise 3: Project

#### Secondary market website

1) Create a template for your entire site such that you define the header and footer once and include them in each page of the site. This should be done using PHP.

The following is just as a reminder of what the header and footer should contain.

- **Header:** It should include the name of your adoption service and a logo/picture. Clicking on the logo/picture should take you back to the home page. It should also display the current date and time. The Time should automatically refresh every second.
- **Footer:** This should appear at the bottom of all your pages. Give it a distinct background color.

2) You will manage 2 text files which will reside on the server.

- a. A login file which will contain username and passwords. This file will be consulted when a user is logging in or will be written to when a new user registers.
- b. An available goods information file that will store the information entered by a user when they registered their goods.

3) Functionality of your site: Following is a review of each of the entries in your menu.

- **Home:** no changes from version 1
- **Create an account:** When a user clicks on this menu option, a login creation page loads into the content area with text fields for a username and one for a password as well as a description of the allowed formats for usernames and passwords. A username can contain letters (both upper and lower case) and digits only. A password must be at least 4 characters long (characters are to be letters and digits only), have at least one letter and at least one digit. Before sending this information to the server, make sure that the entered username and password satisfy the format criteria just listed. As usernames are unique, you need to make sure that there isn't already such a user name in use. If the requested username already exists, the server sends back a message requesting a new username/password pair informing the user that this username is not available. If the username is not already in use, then write this new pair to the login file and return a message to the content area confirming that the account was successfully created and that they are now ready to login whenever they are ready.
- **Check available goods:** Before a user can check the goods on the website, he/she must first log in. If it is a registered login/password pair a new **session** is started. If the pair does not exist, a message is send back to the browser saying that the login failed. A user can try as many times as they want to login. Once they have successfully logged in, they can check available goods on the website.

- **Have something to sell:** Before a user can create an entry for new goods on the site they must first log in. Here is the behavior of this option:

When a user clicks on this menu option, they will first be asked to login. The client side needs to make sure that the format of both the username and password entered satisfy the criteria. When the user clicks the Submit button, the server will check by reading the login file that this login pair exists. If it is a registered login/password pair a new **session** is started. If the pair does not exist, a message is send back to the browser saying that the login failed. A user can try as many times as they want to login.

Once they have successfully logged in, they can fill out the form and once a form is submitted, the information is written into available goods information file.

- **LogOut:** This option terminates a user's session. The server should return and display a confirmation message.

- **Contact us:** no change from version 1.

Note: since this assignment introduces PHP into the project, it is likely that some of your web pages will have to have their extensions changed from .html to .php.

### Evaluation Criteria for Assignment 4 (20 points)

<b>Exercise 1 – 3 points</b>	
a) splitSort	1
b) uppercaseFirstandLast	1
c) findAverage_and_Median	1
<b>Exercise 2 - 5 points</b>	
a) Create cookie	2
b) Store visits count using cookies	1
c) Show the visits count and date & time	1
<b>Exercise 3 - 12 points</b>	
a) Create an account	2
b) Login procedure	2
c) Session activation when logon	2
d) Logout procedure	2
e) Check available goods	2
f) Have something to sell	2