

Due: to BCIT's SHARE/IN server before the start of lesson 7.

This assignment tests everything we covered in lessons 1 – 5.

Each file must contain the following comments at the start of the file; fill in with actual values for your files:

```
/*      Author:          (your name)
        Date:           (date the file was last modified)
        File name:       (actual name of the file)
        File description: (a brief overview explaining what this file does)
*/
```

This assignment tests:

- basic php syntax (lessons 1 and 2)
- form data collection (lesson 3)
- arrays and functions (lesson 3)
- text files (lesson 4)
- regular expressions (lesson 5)
- cookies (lesson 6)

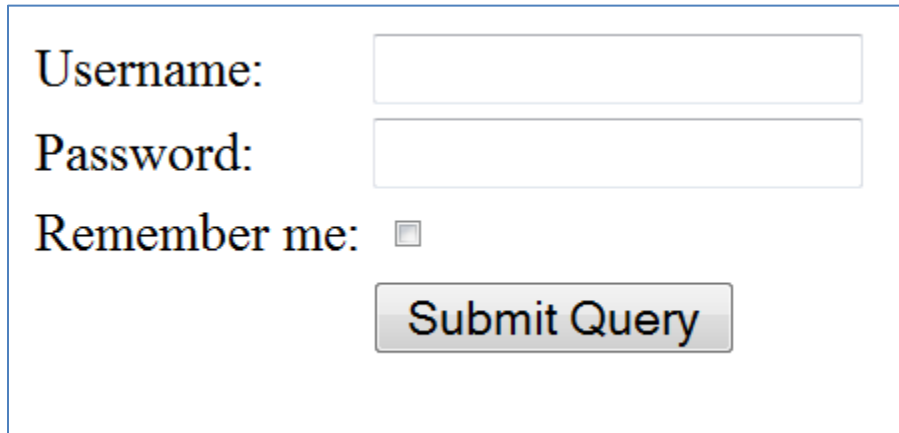
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This assignment acts as a bookstore for customers.

File 1: index.php

1. The title of the page has the text `<title> comp 1920 assignment 1 by firstname lastname </title>` (use your own first and last names)
2. The page has a form as follows:



A screenshot of a web form enclosed in a blue border. The form contains the following elements: a label 'Username:' followed by a text input field; a label 'Password:' followed by a text input field; a label 'Remember me:' followed by an unchecked checkbox; and a 'Submit Query' button with a grey gradient and rounded corners.

The username text box has the name “u”.

The password password field has the name “p”.

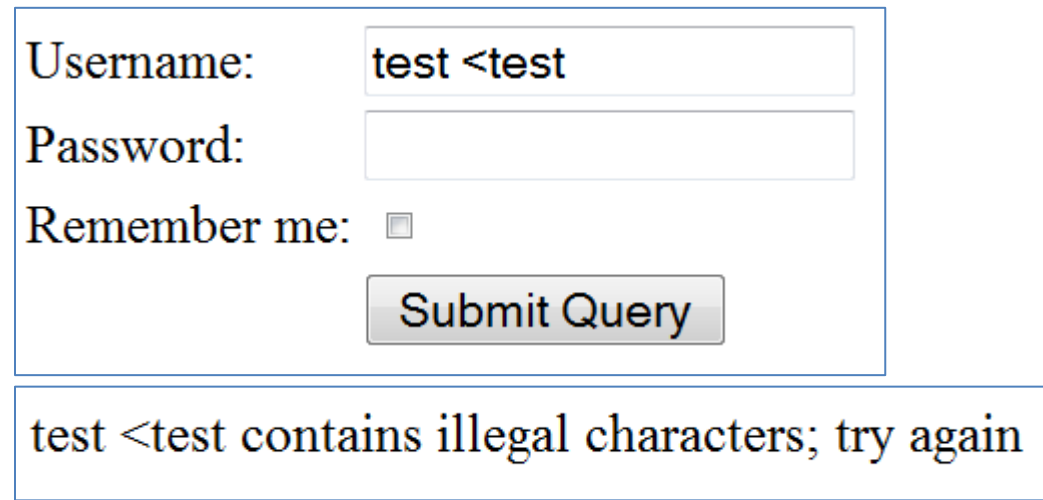
The remember-me checkbox has the name “remember”.

The method of the form is “post”.

The action of the form is “index.php”.

3. If the user is not providing cookies nor POST data to the form, then the form must be displayed empty (as in the screenshot above).
4. If the user is providing POST data to the form, then that data must be validated by the form as follows:

If the username or password contain the less-than character < or the greater-than character > give an error message and do NOTHING else:



Username:

Password:

Remember me: ☐

test <test contains illegal characters; try again

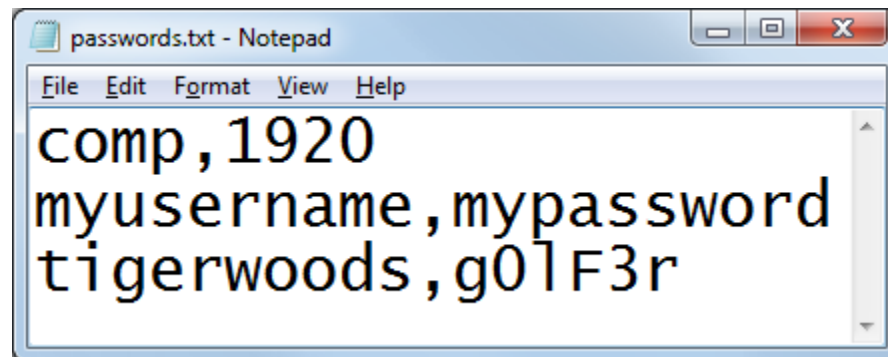
There must be a file named “passwords.txt” with data in it as follows:

username1,password1

username2,password2

etc...

For example:



etc...

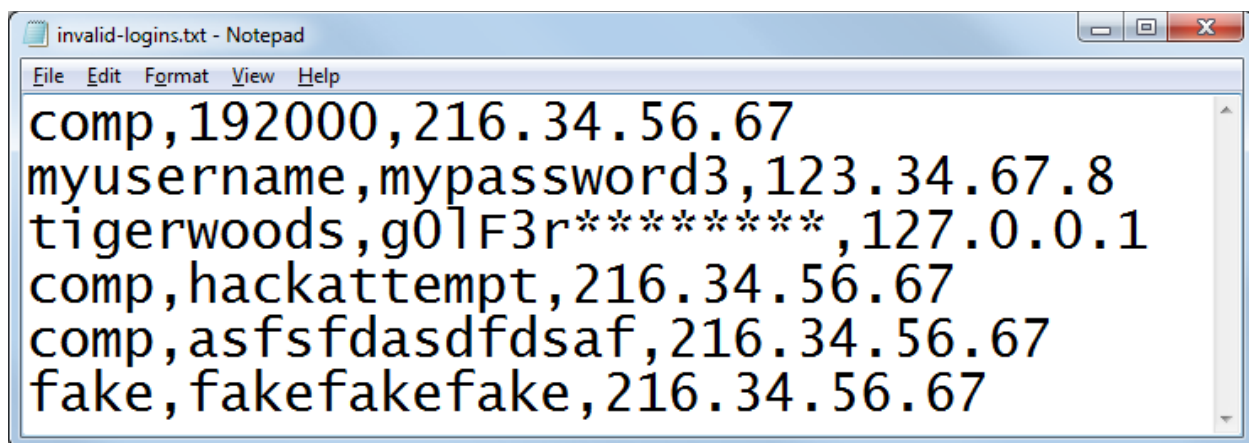
If the POST username and password match data from passwords.txt, then create a cookie named “uname” with the value of the username, and also create a cookie named “loggedintime” which stores the time that they logged in (using the time() function), and show them a menu of options available to them:

Welcome tigerwoods!

You have been logged in for 0 seconds

- [Browse books in store](#)
- [Book analytics](#)
- [Log out](#)

If the POST username and password do not match data from passwords.txt, append to (and/or create) a file called invalid-logins.txt which stores the username, password, and IP Address of the attempted login, as follows:



...and show the user a generic message as follows:

Invalid user/login. This has been logged along with your IP Address 216.34.56.67

Username:

Password:

Remember me: ☐

5. If POST data is being supplied and the “remember” checkbox was checked, then a cookie (storing the username) must be set for 20 minutes and any future visits within 20 minutes to index.php would “automatically” fill in the username text box with the cookie’s value and the checkbox must be “automatically” checked, as follows:

Username:

Password:

Remember me: ☒

6. If, within those 20 minutes, the user visits this page and logs in with the box UNCHECKED, then the username-cookie must be deleted and the checkbox will no longer be “automatically” checked:

Username:

Password:

Remember me: ☐

File 2: browse-books-in-store.php

1. If the user has not logged in (i.e., there is no cookie storing their username), then do NOTHING except show a message and a link to index.php:

You must log in first

If the user has logged in, then create a text file named “books.txt” which stores the titles and author names of books, in this format:

TITLE1 by firstname1 lastname1 published year1 born year1

TITLE2 by firstname2 lastname2 published year2 born year2

Etc...

Example books.txt file:

ULYSSES by James Joyce published 1922 born 1882

THE GREAT GATSBY by F. Scott Fitzgerald published 1925 born 1896

ERROR1 by Oopsy Daisy published 1999 born 2012

A PORTRAIT OF THE ARTIST AS A YOUNG MAN by James Joyce published 1916 born 1882

LOLITA by Vladimir Nabokov published 1955 born 1899

MISTAKE2 by Some One published 1940 born 1970

BRAVE NEW WORLD by Aldous Huxley published 1932 born 1894

ERROR3 by Miss Take published born 1988

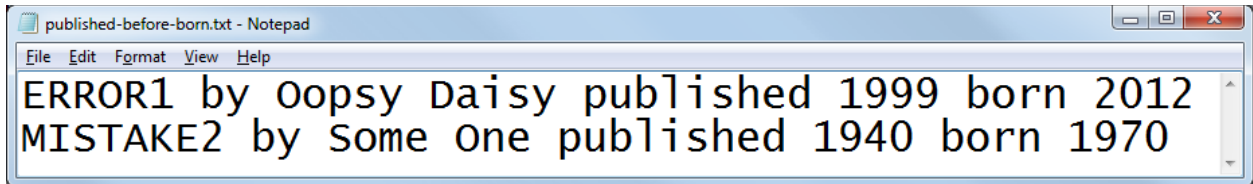
THE CATCHER IN THE RYE by J.D. Salinger published 1951 born 1919

UHOH4 by Who Ever published 1995 born

2. This script (browse-books-in-store.php) must detect the following types of errors:
 - a. If the published year comes BEFORE the born year (see books ERROR1 and MISTAKE2, above)
 - b. Missing any year (see book ERROR3 and UHOH4, above)

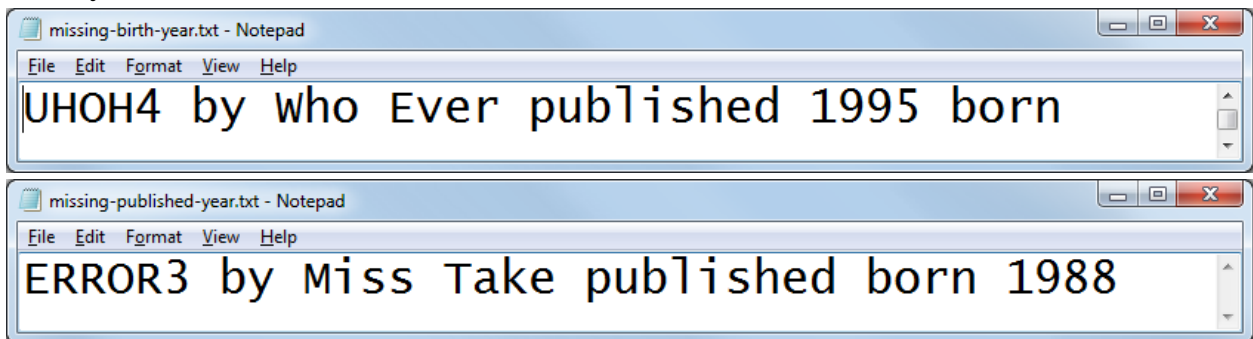
This script (browse-books-in-store.php) reads the file and puts the contents into an array. If any erroneous data is found for a book (see above, a. and b.), it is appended to one of two error logs as follows:

- a. Published-before-born errors are appended to a log file (text file) named published-before-born.txt:



```
published-before-born.txt - Notepad
File Edit Format View Help
ERROR1 by Oopsy Daisy published 1999 born 2012
MISTAKE2 by Some one published 1940 born 1970
```

- b. Missing-published-year errors are appended to a log file named missing-published-year.txt, and missing-birth-year errors are appended to a log file named missing-birth-year.txt:



```
missing-birth-year.txt - Notepad
File Edit Format View Help
UHOH4 by who Ever published 1995 born

missing-published-year.txt - Notepad
File Edit Format View Help
ERROR3 by Miss Take published born 1988
```

3. The erroneous data (above) will NOT be in the array of books. The array will only contain data for the valid books:

ULYSSES by James Joyce published 1922 born 1882

THE GREAT GATSBY by F. Scott Fitzgerald published 1925 born 1896

A PORTRAIT OF THE ARTIST AS A YOUNG MAN by James Joyce published 1916 born 1882

LOLITA by Vladimir Nabokov published 1955 born 1899

BRAVE NEW WORLD by Aldous Huxley published 1932 born 1894

THE CATCHER IN THE RYE by J.D. Salinger published 1951 born 1919

This script will display the list of books in a table, sorted by published year, with row (color) striping:

Title	published	Author last name	Author first name	Birth year
A PORTRAIT OF THE ARTIST AS A YOUNG MAN	1916	James	Joyce	1882
ULYSSES	1922	James	Joyce	1882
THE GREAT GATSBY	1925	F. Scott	Fitzgerald	1896
BRAVE NEW WORLD	1932	Aldous	Huxley	1894
THE CATCHER IN THE RYE	1951	J.D.	Salinger	1919
LOLITA	1955	Vladimir	Nabokov	1899

The script will also show a list of links for the website:

Title	published	Author last name	Author first name	Birth year
A PORTRAIT OF THE ARTIST AS A YOUNG MAN	1916	James	Joyce	1882
ULYSSES	1922	James	Joyce	1882
THE GREAT GATSBY	1925	F. Scott	Fitzgerald	1896
BRAVE NEW WORLD	1932	Aldous	Huxley	1894
THE CATCHER IN THE RYE	1951	J.D.	Salinger	1919
LOLITA	1955	Vladimir	Nabokov	1899

Welcome tigerwoods!

You have been logged in for 33 seconds

- [Browse books in store](#)
- [Book analytics](#)
- [Log out](#)

File 3: book-analytics.php

1. If the user has not logged in (i.e., there is no cookie storing their username), then do NOTHING except show a message and a link to index.php:

You must log in first

2. This script uses books.txt again and puts the data into array as necessary to produce four reports about the books:
 - Which author wrote the most books?
 - Which author was the oldest when they published their book?
 - What is the longest book title?
 - How many books were published before 1950?

Which author was the oldest when they published their book? What is the longest book title? How many books were published on weekends (Saturdays or Sundays)?

James Joyce wrote the most books (2 books)

Vladimir Nabokov was the oldest author(56 years)

A PORTRAIT OF THE ARTIST AS A YOUNG MAN is the longest title (39 letters)

2 books were published before 1950 (LOLITA, CATCHER IN THE RYE)

-
- [Browse books in store](#)
 - [Browse books in cart \(i.e., your cookies\)](#)
 - [Book analytics](#)
 - [Log out](#)

3. Special books are also identified. Special books are those whose title matches the following pattern:

They have a date in them of the format “yyyy-mm-dd” or “yyyy/mm/dd”. For example:

Welcome tigerwoods!

You have been logged in for 112 seconds

James Joyce wrote the most books (2 books)

Vladimir Nabokov was the oldest author(56 years)

A PORTRAIT OF THE ARTIST AS A YOUNG MAN is the longest title (39 letters)

2 books were published before 1950 (LOLITA, CATCHER IN THE RYE)

3 special books have been identified!

1. This is a silly book written in 2000-12-25
2. Testing 1999/01/31 over and over
3. Dates such as 2000/10/31 are spooooky

-
- [Browse books in store](#)
 - [Book analytics](#)
 - [Log out](#)

File 4: logout.php

This page completely deletes all of the cookies and shows a link to sign in again:

You can [log in](#) again

Marking Guide: Total marks: 100

Script	Test	Result should be	Deductions if not done
Any script	Comments	Author, name, date, description	2 each
	Error logs get created	Only if they do not exist; do NOT overwrite log files; only append	5
index.php	Title	Has your name	2
	No POST provided	Empty form	2
	Form input contains < or > characters	Error message	5
	Username and password found in passwords.txt	Create cookies for logintime and username	10
	Username and/or password not matched in passwords.txt	invalid-logins.txt log file is appended to with ip address, username, password	5
	User checks 'remember me' checkbox	Remember me checkbox is checked automatically when user checked it earlier	5
	User unchecks 'remember me' checkbox	Remember me checkbox is unchecked automatically when user checked it earlier, and all cookies are deleted	10
	Page is visited with cookies set	Username field automatically populated	5
	Menu of pages is displayed	If and only if user is logged in	5

	passwords.txt	Student submitted their own file with their assignment	5
browser-books-in-store.php	User has not logged in	Error message	5
	books.txt	Student submitted their own file with their assignment	5
	Greeting	Shows username and number of seconds since they have logged in	10
	Books.txt	Has errors with missing published years, birth years, and published-before-born	6 (2 each)
	Published year precedes birth year	Appended to published-before-born.txt log file	5
	No published year	Appended to missing-published-year.txt log file	5
	No birth year	Appended to missing-birth-year.txt log file	5
	Books displayed in table	Only valid books; no error books	5
	Books displayed in table	In order of when they were published	10
	Books displayed in table	Rows are not striped	5
	Menu of pages is displayed	If and only if user is logged in	5
book-analytics.php	User has not logged in	Error message	5
	Who wrote the most	Author of the most	5

	books		
	Who wrote the most books	Correct number	5
	Who wrote the most books	Author, number are in red	5
	Oldest author	Correct name	5
	Oldest author	Correct age	5
	Oldest author	Author, age are in red	5
	Longest title	Correct title	5
	Longest title	Correct length	5
	Longest title	Title, length are in red	5
	Number of published books before 1950	Correct number	5
	Number of published books before 1950	Correct titles	5
	Number of published books before 1950	Number, titles are in red	5
	Menu of pages is displayed	If and only if user is logged in	5
	Special books are also listed	Books that match the regular expression are identified as special	10
	Special books are also listed	In an ordered list	5
logout.php	Deletes all cookies	All cookies deleted	15
	Message displayed	With link to index.php	5

NOTE: You start with 100 marks and lose marks according to the table above.

Submission rules:

Name your four scripts as specified.

Create a folder called firstname-lastname where firstname is your first name and lastname is your last name (e.g. jason harrison would create a folder named jason-harrison).

Inside that folder put your four scripts plus your passwords.txt file and your books.txt file.

Zip that folder named as firstname-lastname.zip (use your own name).

Upload the zip file with the four scripts and two text files to BCIT's server under the assignments/assignment01 folder.

Use an FTP client to upload your file as follows:

Hostname myftp.bcit.ca

Servertype: FTPES – FTP over explicit TLS/SSL

Username: your student number (e.g. A00112233)

Password: usually, your birth date (e.g. yymmdd such as 19801231)

Port: 21

Directory: IN/COMP/1920/assignments/assignment01

For more information about uploading the file see:

<https://helpdesk.bcit.ca/fsr/sr/network/734.html>