Assignment 1 – PhotoFun

KXC381 Advanced Dynamic Web Development

Assignment 1 (15%) Due: Thursday 5th of April at 3 pm

Introduction

This assignment (and Assignment 2) is about the development of a photo sharing website. This website contains both a public and a private sections. The public version is for browsing through photos that have been submitted by users. The private section of the website allows for a user to upload photos to the website.

Assignment 1 has a focus on the basic structure of the website and the ability for users to log in an out of the private section of the website. If you do not complete or finish assignment 1, it will need to be completed in assignment number 2, as it builds directly on what you complete in assignment 1.

Assignment 1 will make of text files for storing data about the users and the uploaded images. Assignment 2 will make use of a mysql database.

Detailed Website Description

Assignment 1 consists of multiple PHP files, several text files and the images that have been uploaded to the website. Along with any CSS or image files that make up the websites design. All of these need to be arranged in a logical structure. All the uploaded images should be stored in a folder called `submissions` and the text files used for data storage in a folder called `data`. The remainder are stored in the base directory.

The front page, and indeed the main page for viewing images, is to be called `index.php`.

The public section is comprised of three pages:

- the homepage (`index.php`)
- the registration page
- the login page

All three pages need a menu that contains all three options to allow for easy navigation. The location and design of the menu is up to you.

The homepage displays the most recently submitted photo and will also contain comments below it made by other registered users. There will be a link on the page to the next photo in the collection. Once you have pressed next the page will reload showing the next photo, but will contain a link to go back to the previous photo.

The Registration page allows for a user to create and account on the PhotoFun website. It should contain a form that takes username, password, password check, email address. It should also contain a form items that use a checkbox, radio buttons and a dropdown menu. Each of these should have multiple options to select from. The minimum number of pieces of information that the form is getting from the user is 7.

The Login page should just contain a username and password field along with the submit button. However, once the user has successfully logged in they should then have two extra items added to the menu: Logout and Submit. This is the private version of the website. The logout page should simply log the user out returning the state of the website to the public version.

The Submit page allows a logged in user to be able to submit, and indeed upload, a new image to the website. This will be uploaded and stored in the images folder and then be the new image on the start of the front page.

Data Storage

This website has several items of data that it needs to store: user login data, a photo list and user comments. Both of these sets of data will be stored in text files and loaded when required.

The user login data, and the rest of the data from the registration form, is to be stored in a file called `users.txt` stored in the folder called `data`. It will be stored in a format like this

```
username|password|email|..|..|
```

The '|' symbols are used to delimit the content on a row. Each different user is stored on a different row, and each row is split up by '|' symbols to make the columns of data. When a user logs in a username that matches the one presented by the user is found in the users.txt and the password is checked against the password they entered.

When a new photo is uploaded a line is added to a file called `list.txt` in the `data` folder. This file contains all the photo names and an ID number of the images. The ID number is a sequential number and is used as an index to find the image required to be displayed on a page. i.e the ID number is used in the next and previous links on a page, and is used to look up what image is to be loaded next.

The last data needing to be stored by the website is comments made about photos. When a photo is uploaded a new file is created with the ID number is the name of the file. This file will contain all of the comments made about a specific photo. So when loading a page that contains a photo the image is added to the page, but in addition to this, the comments file relating to the photo are loaded and added to the page. The format used for storing this data is up to the student, although delimiting the comment maker's name, comment and end of the comment is suggested.

When a user is logged in a comment form is added to the photo page. When a comment is made it is recorded in the file with the ID number for that photo. It should be appended to the bottom so that the oldest comment is at the top of the file.

Late Submissions

Late assignments will only be accepted in exceptional circumstances and provided that the proper procedures have been followed (see the web site). Assignments that are submitted late without good reason will be subject to mark penalties if they are accepted at all (see the web site for details on this as well).

Forms to request extensions of time to submit assignments are available from the web site. Requests must be accompanied by suitable documentation and should be submitted before the assignment due date.

Hints for completing the Assignment

- Read the specification carefully. Make sure that you know what your system needs to do.
- Look at the examples in tutorials and lectures, to see whether you have seen similar tasks before.
- Try out techniques that you think will do the job. Test them thoroughly to see that the code you have written performs the task correctly.
- DO NOT neglect your tutorial work in the unit to work on the assignment. Some of the tutorial activities may lead you to see what needs to be done in the assignment.
- DO NOT leave working on this assignment until the last few days – you are unlikely to be able to finish it if you do.
- You may seek help with this assignment in normal consultation times for this unit or via email to your lecturer. Here are some hints to make best use of help.
    - Make sure you know (or think you know) what your problem is.
    - Have details of the work you have done so far and the progress you have made on hand when you seek help.
    - The more specific you can be in your request for help the more immediately useful the help is likely to be.

Plagiarism

Practical assignments are used by the School of Computing for students to both reinforce and demonstrate their understanding of material which has been presented in class. They have a role both for assessment and for learning. It is a requirement that work you hand in for assessment is substantially your own.

Working with others

One effective way to grasp principles and concepts is to discuss the issues with your peers and/or friends. You are encouraged to do this. We also encourage you to discuss aspects of practical assignments with others. However, once you have clarified the principles, you must express them in writing or electronically entirely by yourself. In other words you must develop the algorithm to solve the problem and write the program which implements this algorithm yourself.

Cheating

- Cheating occurs if you claim work as your own when it is substantially the work of someone else.
- Cheating is an offence under the Ordinance of Student Discipline within the University. Furthermore, the computing profession has ethical standards in which cheating has no place.
- Cheating involves two or more parties.
    - If you allow written work, computer listings, or electronic version of your code to be borrowed or copied by another student you are an equal partner in the act of cheating.
    - You should be careful to ensure that your work is not left in a situation where it may be stolen by others.
    - Where there is a reasonable cause to believe that a case of cheating has occurred, this will be brought to the attention of the unit lecturer. If the lecturer considers that there is evidence of cheating, then no marks will be given to any of the students involved. The case will be referred to the Head of School for consideration of further action.

Submission of Assignment

What to submit:

A single directory with the name of this directory being be the same as your UTAS student id number.

The contents of this directory should be:

- a file called `index.php` that is the homepage for the website
- a directory called `data` that contains all of the files used for storing data
- a directory called submissions that contains the submitted images.
    - You shouldn't submit an assignment with more than 10 images. We don't want submissions that are over **5 megabytes in size!**

How to submit:

The directory containing your work should be compressed in its entirety using WinZip or a similar common compression tool to <student id>.zip . It should then be emailed to both whgong@zjut.edu.cn and joel.scanlan@utas.edu.au. Please also include your name and your ID number(s) inside the index.html as a comment at the top of the file.