ECS417U mini project: create your own blog

Summary

In this project, we will create a simple tool for writing and reading a web log (blog). One user, the blogger (yourself), will be able to add text entries to the blog. The most recent entry will appear at the beginning of a web page, followed by the next most recent, and so on for all entries. Links elsewhere on the page will provide access for the blogger to log in and add new entries. Other capabilities will be described later in this document. Note that there is no constraint on the type of content you put in your blog entries (they can be about e.g. computer games, cars etc.).

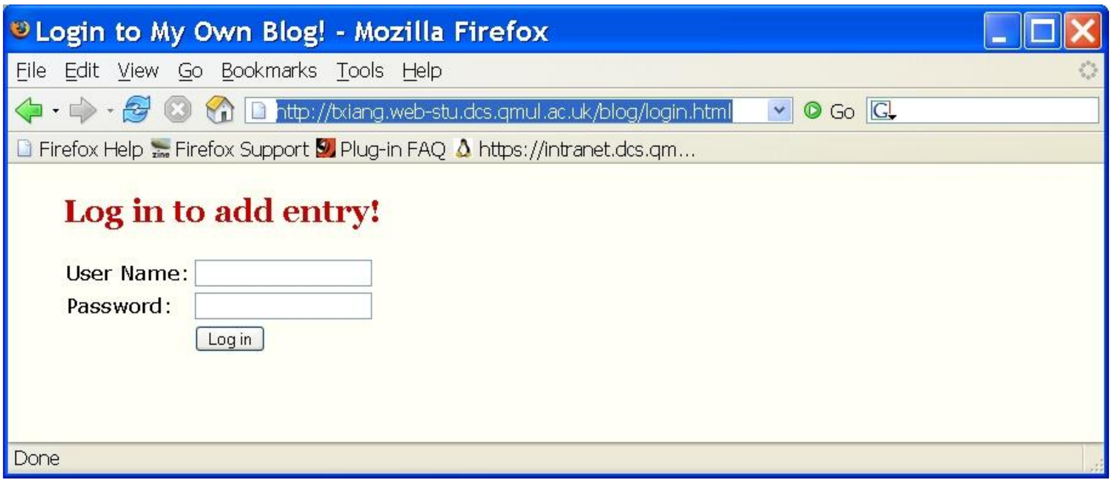
To finish this project, you will need to use all the major web technologies covered in the ECS417U Fundamentals of Web Technology module. Specifically, XHTML or HTML5 and CSS will be used mainly to create the front page of the blog, and the “log in” and “add entry” web pages. JavaScript will be used to achieve one functionality in the “add entry” web page. PHP will be the server-side programming language for access control and generating dynamical web pages for the blog.

This mini project accounts for 15% of the final mark for this course.

Basic functionalities and requirements

The URL for your blog will be:
http://webprojects.eecs.qmul.ac.uk/your-log-in/blog/
(replace “your-log-in” with your EECS login)

The first time the blog is visited (i.e. when there are no entries), the above URL will be automatically redirected to:
http://webprojects.eecs.qmul.ac.uk/your-log-in/blog/login.html, which should look similar to the figure below:



http://txiang.web-stu.dcs.qmul.ac.uk/blog/login.html

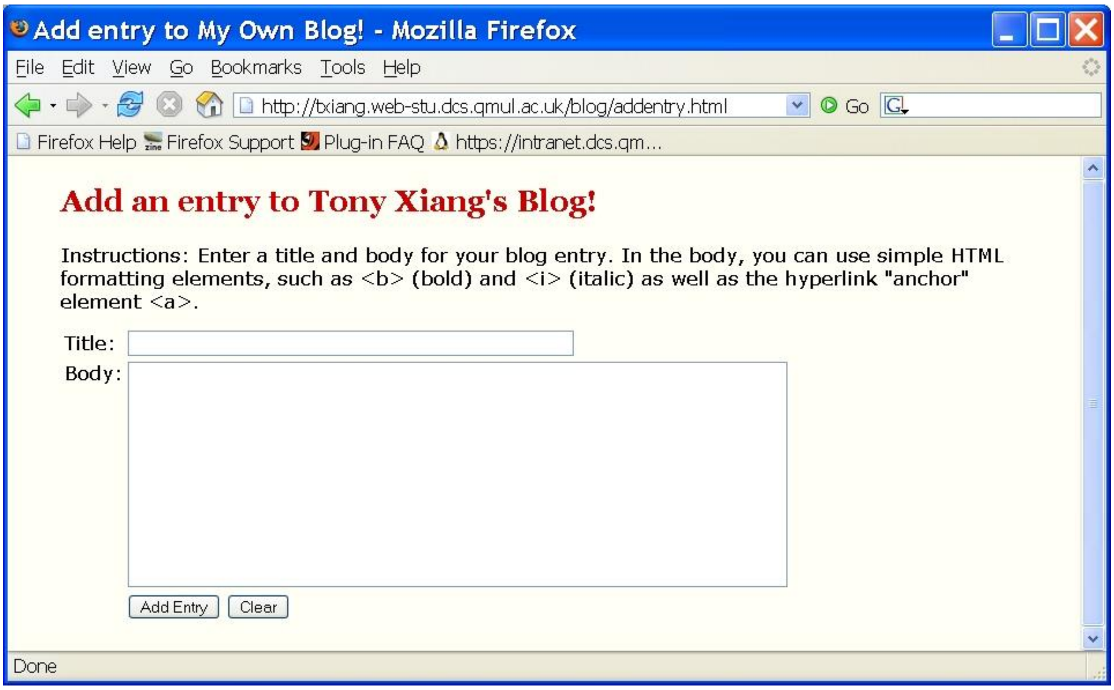
Log in to add entry!

User Name:

Password:

Note that the left edges of the text boxes and button must be aligned.

The blogger inputs a user name and a password. After clicking the “log in” button, the information will be processed by a PHP file named login.php. If both the user name and the password are correct, an XHTML document named “add_entry.html” will be displayed, which should look like the example below.


Add entry to My Own Blog! - Mozilla Firefox
File Edit View Go Bookmarks Tools Help
http://txiang.web-stu.dcs.qmul.ac.uk/blog/addentry.html
Go
Firefox Help Firefox Support Plug-in FAQ https://intranet.dcs.qm...
Done

Add an entry to Tony Xiang's Blog!

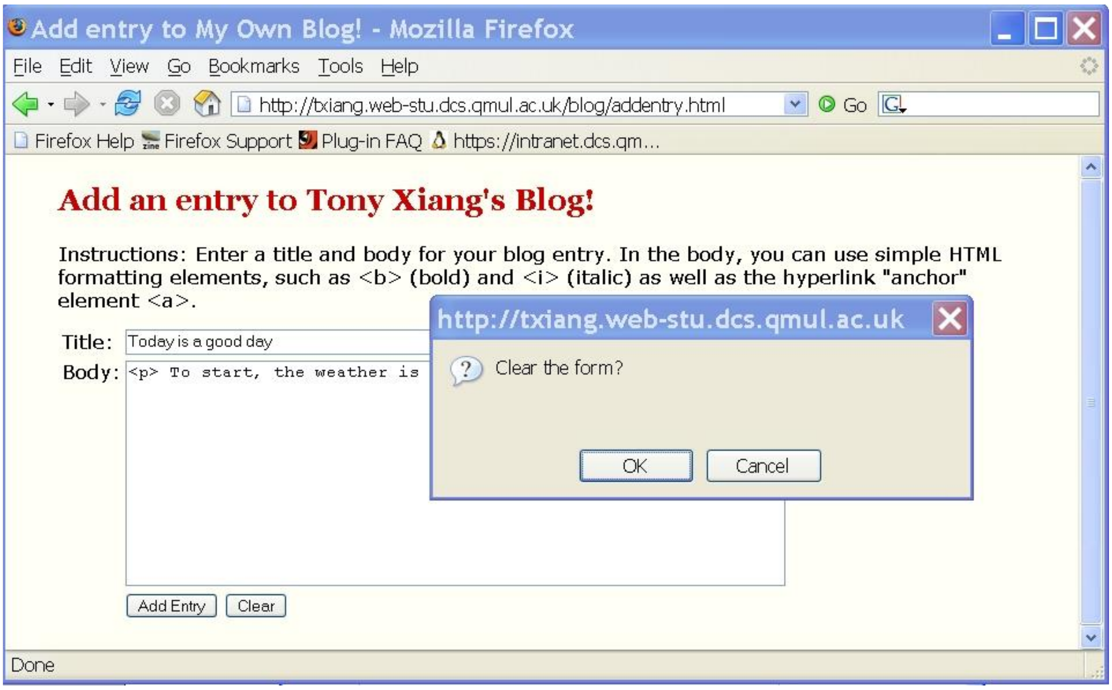
Instructions: Enter a title and body for your blog entry. In the body, you can use simple HTML formatting elements, such as <b> (bold) and <i> (italic) as well as the hyperlink "anchor" element <a>.

Title:

Body:

Add Entry Clear

Again, the left edges of the text box (next to “Title”), the text area (next to “Body”), and the “Add Entry” button should be aligned. There are two buttons: “Add Entry” and “Clear”. If the “Clear” button is clicked, a message window will pop out and ask the blogger to choose between “OK” or “Cancel” (see the screenshot of an example below). If “OK” is chosen, the inputs in the textbox and text area will be cleared. If “Cancel” is clicked, the content won’t be cleared. This is to prevent the blogger from clicking the “Clear” button by mistake (intending to click “Add Entry”) and lose all the input.


Add entry to My Own Blog! - Mozilla Firefox
File Edit View Go Bookmarks Tools Help
http://txiang.web-stu.dcs.qmul.ac.uk/blog/addentry.html
Go
Firefox Help Firefox Support Plug-in FAQ https://intranet.dcs.qm...
Done

Add an entry to Tony Xiang's Blog!

Instructions: Enter a title and body for your blog entry. In the body, you can use simple HTML formatting elements, such as <b> (bold) and <i> (italic) as well as the hyperlink "anchor" element <a>.

Title: Today is a good day

Body: `<p> To start, the weather is`

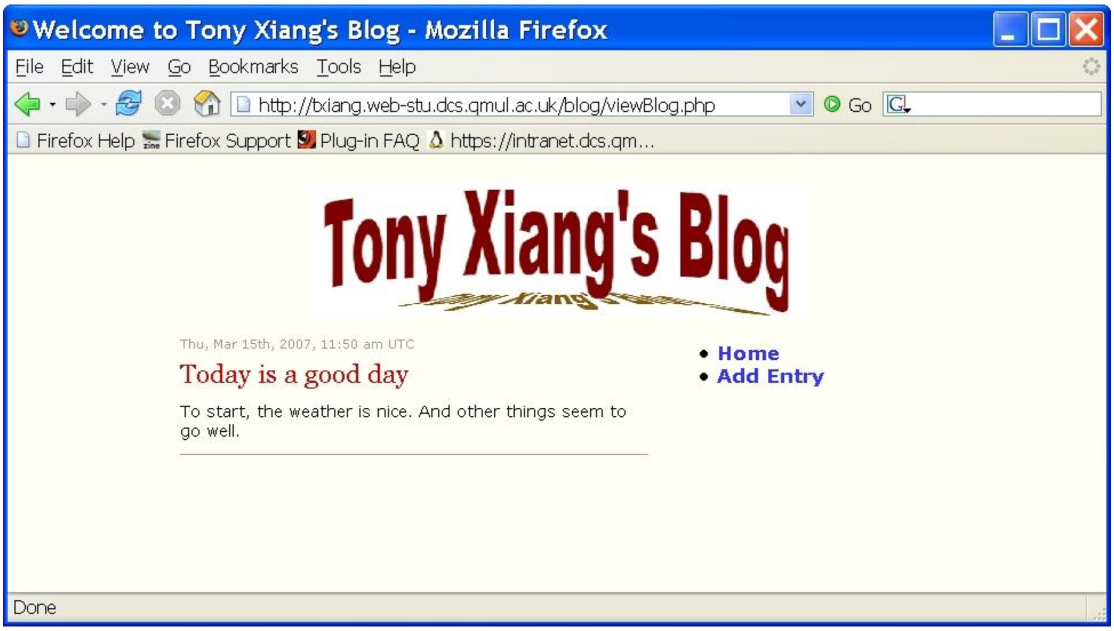
http://txiang.web-stu.dcs.qmul.ac.uk

Clear the form?

OK Cancel

Add Entry Clear

After inputting a title and body text (in XHTML/HTML5 format) in the textbox and text area, the blogger clicks the “Add Entry” button. The input data are then processed by a PHP document named “addentry.php”. What the document does is to save the new entry into entry files and redirect the page to another PHP document named “viewBlog.php”. What is displayed in the browser display window should look like this:


Welcome to Tony Xiang's Blog - Mozilla Firefox
File Edit View Go Bookmarks Tools Help
http://txiang.web-stu.dcs.qmul.ac.uk/blog/viewBlog.php
Go
Firefox Help
Firefox Support
Plug-in FAQ
https://intranet.dcs.qm...
Tony Xiang's Blog
Done

Thu, Mar 15th, 2007, 11:50 am UTC

Today is a good day

To start, the weather is nice. And other things seem to go well.

- Home
- Add Entry

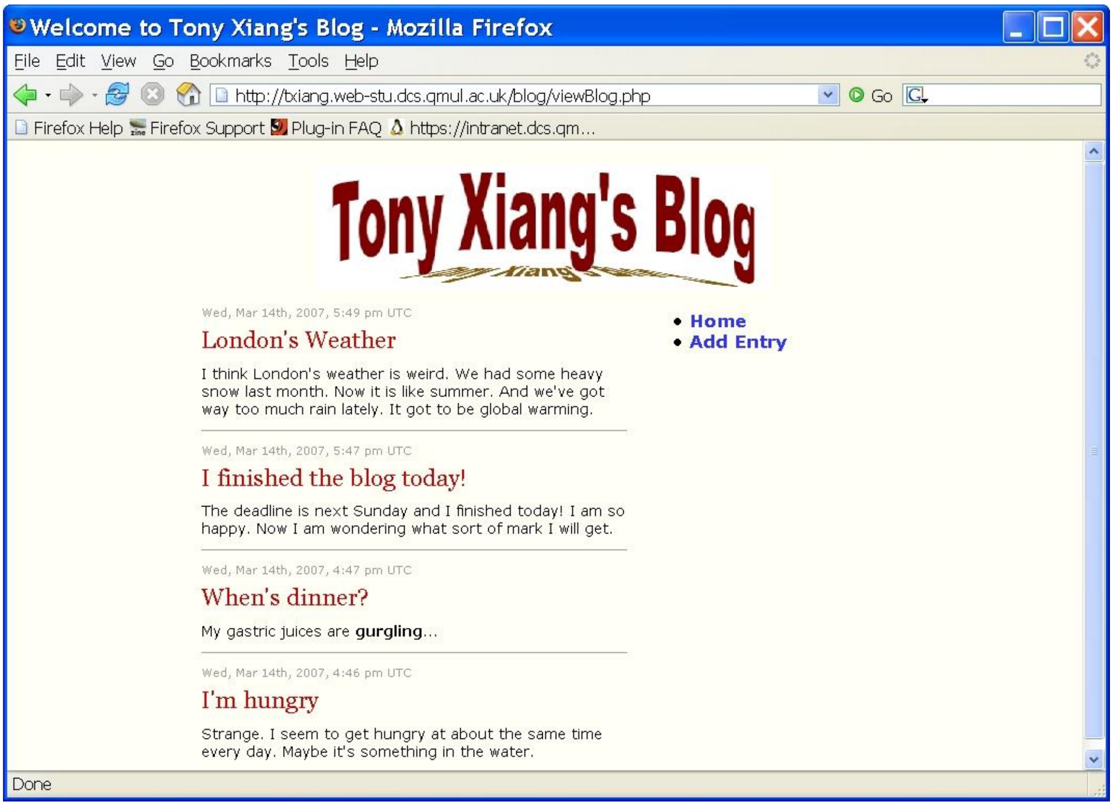
The main functionality of “viewBlog.php” is to display all the entries stored in entry files on the server. In the above example, there is only one entry. “viewBlog.php” is also the front page of your blog. The web page has a two-column centred layout with a header containing a banner image. One column displays the blog entries and the other column provides links. These links should at least include “Home” and “Add Entry”. The former links to http://webprojects.eecs.qmul.ac.uk/your-log-in/blog/ and the latter points to http://webprojects.eecs.qmul.ac.uk/your-log-in/blog/login.html. This layout should be created using CSS.

In the entry column, each blog entry must include three components:

1. The date and time when the entry was added. It must follow the same format as shown in the above example
2. A title
3. An entry body

Different entries are separated using horizontal rules. There should be a CSS style rule dedicated to each of the three components making them distinguishable (e.g., different font sizes/colours).

Each time the blog is visited at http://webprojects.eecs.qmul.ac.uk/your-log-in/blog/, the “viewBlog.php” web page is shown. The blogger can then add a new entry by clicking the “Add Entry” link. This takes the blogger to the login page and the procedure to add new entries is identical to that of adding the first entry to the blog. Below is an example of a blog with multiple entries:


Welcome to Tony Xiang's Blog - Mozilla Firefox
File Edit View Go Bookmarks Tools Help
http://txiang.web-stu.dcs.qmul.ac.uk/blog/viewBlog.php
Go
Firefox Help
Firefox Support
Plug-in FAQ
https://intranet.dcs.qm...
Tony Xiang's Blog
Home
Add Entry
Done

Wed, Mar 14th, 2007, 5:49 pm UTC

London's Weather

I think London's weather is weird. We had some heavy snow last month. Now it is like summer. And we've got way too much rain lately. It got to be global warming.

Wed, Mar 14th, 2007, 5:47 pm UTC

I finished the blog today!

The deadline is next Sunday and I finished today! I am so happy. Now I am wondering what sort of mark I will get.

Wed, Mar 14th, 2007, 4:47 pm UTC

When's dinner?

My gastric juices are **gurgling**...

Wed, Mar 14th, 2007, 4:46 pm UTC

I'm hungry

Strange. I seem to get hungry at about the same time every day. Maybe it's something in the water.

To summarise, the following are the key documents you should write and their functionalities (please make sure to use the suggested file names for easy assessment):

- **index.php**: redirects to viewBlog.php for displaying blog entries
- **viewBlog.php**: displays blog entries stored in entry files, and redirect the user to login.html if there is not entry
- **login.html**: asks the blogger to input user name and password
- **login.php**: checks the username and password and redirects to addentry.html if correct
- **addentry.html**: asks the blogger to add an entry
- **addentry.php**: saves the new entry to entry files and redirects to viewBlog.php

The main requirements will be:
1, Using XHTML and CSS to achieve: a two-column centred layout, and a header with banner image for the front page (viewBlog.php). Set a CSS style rule for each of the three components of a blog entry to make them distinguishable. For login.html and addentry.html, generate the right forms and align elements correctly. Note that you can modify an online CSS template for your own use in this project, provided that you acknowledge the source somewhere on your webpages.

2, Using JavaScript to achieve: the event processing for clicking the "Clear" button.

3, Using PHP to achieve: processing of the forms in login.html and addentry.html; writing into entry files date and time, title, and body text for each entry.

Extra features

This project is meant to be an open-ended project. After finishing the above-mentioned basic functionalities, you could add extra features to you blog using either techniques covered in the course or those you've taught yourself. Examples of extra features are:

- Using database to manage your blog entries. This feature alone is worth the full extra marks. I recommend each of you to try this as the priority.
- Organising your blog entries into different months. Provide a drop-down menu for the blog viewers to view the entries of different months stored in an entry archive.
- Allowing blog viewers to log in and add comments to the entries. You, as the administrator of the blog should be able to delete entries or comments.
- Adding a "preview" button in addentry.html. When this button is clicked, the new entry is previewed and you can then decide whether to upload the entry or go back to edit it.
- Integrating social media platforms such as Facebook and Twitter. This ranges from adding social sharing buttons, using Facebook Login to manage access to your blog, to using social based comment systems such as Facebook Comments.

You are strongly encouraged to use MySQL to achieve some of the extra features (managing blog entries, and user logins). Note that if you decide to do that, you must use the webprojects server's MySQL database, so that you can demonstrate the project using the computers in the ITL. Read the supplementary slides on the QMPlus course website on how to access MySQL using PHP.

Useful websites

For redirection with PHP, see http://php.about.com/od/learnphp/ht/phpredirection.htm
For PHP file processing, see http://www.tizag.com/phpT/files.php

Notes on Assessment

You don't need to submit anything on the School intranet via the coursework submission link. Instead, you need to upload all the codes to your webprojects server directory. Bring in your own laptop and show your work from there is not acceptable.

You must have a working blog to show during the assessment on the webprojects server (i.e. everything must be uploaded onto your webprojects directories). You must be able to explain your code line by line.

The basic functionalities are worth 10 marks out 15. The extra features are worth 5 marks out of 15.

You can update the work on the webprojects server until **8am Friday the 23rd of March, 2018**. On that day (23/03/18) during your lab session, you have the final chance to have your mini-project marked by a lab demonstrator.

If you can't finish all the functionalities, don't panic. Do as much as you can and you will get marks for your efforts.

Plagiarism cases will be dealt with seriously.