INFS3202/7202 Practical 6
Database Programming

You must present this practical to your lab tutor during your scheduled lab sessions in week 9 that starts 30/04/2012. The prac could be done either in lab, or at home.

Preparation

Before attempting this practical you should have a good working knowledge of HTML/XHTML (Client Side), JSP and PHP (Server Side) and SQL (Database). Before attempting this practical please ensure:
- You have covered the material in Lectures 1-8.
- You have a good understanding of SQL Query Syntax and how to perform queries in PHP/JSP and how to collect results from queries:
    - http://www.w3schools.com/sql/default.asp
    - http://www.php.net/manual/en/ref.mysql.php
- You may install XAMPP on your laptop/lab computers, and use the package to run the web application

Task1: Database Preparation (1 mark)

You are required to use MySQL to create a database to store images info. An image table will be created. It should have four attributes to store image id, image name (i.e., file name), image location (path on hard disk) and timestamp. Real images will be stored on the hard disk.

Task2: PHP + MySQL (2 marks)

In Prac 4, the images in the gallery are fixed. In this task, you are required to apply PHP + MySQL to build a dynamic gallery.

Users can input the maximum number (e.g., N) of images shown on the gallery page. You should assign a default value to N when the gallery page is first accessed. The gallery page should show the first N images when a new maximum number is submitted. A "next" button needs be designed to access the next page, which shows the next N images.
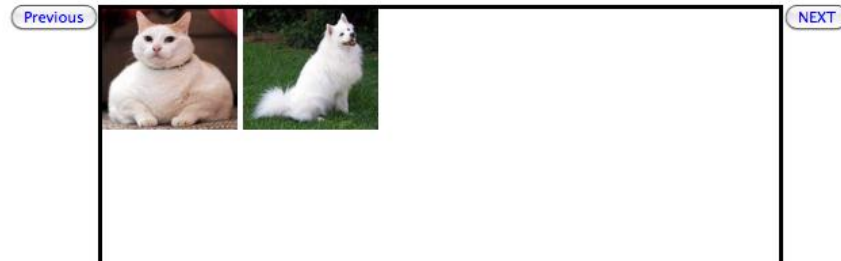
When reach the end of the image table (no more images to show), a message "End of gallery" should be displayed on the gallery page without using a message box or alert.

When click on an image in the gallery, the annotation page designed in Prac4 will be called.

The new gallery page should look like this:

Gallery

Set maximum number of images shown on this page: 2 (submit)

Hint:

To retrieve a fixed number of images from a table for "Next" button, you may want to use "LIMIT" and "OFFSET" in SQL query. Search these two keywords in MySQL manual:

http://dev.mysql.com/doc/refman/5.5/en/select.html

Task3: JSP + MySQL (2 marks)

Redesign the Task 2 of Prac 5 to update the static gallery to a dynamic one by following the requirements given in the above task (Task2). You need to implement maximum number of image on one page and "next" button in this task as well.

Drag-n-drop function will be only performed for the images on the same page. You are **NOT** required to drag the images from different pages to the same album. The file writing function for "submit" designed in Prac 5 will be reused when the tags are submitted (i.e., still write tags to a txt file). It is **NOT** necessary to write the code again. JSP + MySQL is required to be used in this task.

Task4: File Uploading (2 marks)

Create a new page for uploading **multiple** images. Database access is **NOT** required in this task. Simply use PHP to upload images and save them on the server.

- Only images are allowed to upload. You need to check the file type before uploading. *(refer to the lecture notes of week 5)*
- Once a file is uploaded successfully, just show the info like "xxx.jpg is uploaded successfully" on the uploading page. If not, give info "The file(s) to upload is (are) invalid"