INFS3202/7202 Practical 3 – Further File I/O and JSP

(9 marks)

Overview and objectives

The goal of this practical is two-fold, all to be implemented in JSP. You will further explore file input/output as you move more data server side. You will also explore JSP (Java Server Pages) through a number of tasks. You should be working on this Prac in Weeks 6-7. You must present the results to your Lab tutor during your scheduled Lab session in Week 7, beginning the 20/4/2015.   The Prac could be done either in the Lab or at home. You must also upload your code that you have shown to the tutor to Blackboard by 6pm on the day of your Prac session.

This practical exercise is divided into four tasks:

- Reading metadata from a file (3 marks);
- An Admin Log-in page (1 marks);
- An Admin Page (2 marks);
- Editing functionality (3 marks);

Preparation

Before attempting this practical you should have a good working knowledge of HTML, PHP and JSP. Please ensure you that you have covered the material in Lectures 1-4.

As a reminder you should place any JSP task files in the dedicated directory of your personal web server (zone): **/var/www/htdocs/**.

We have prepared a simple JSP test file that contains only one function to test whether your zone setup is functioning. The test file is available on blackboard named jsptest.jsp. You will need to upload the test file to */var/www/htdocs* in order to test your zone.

Task 1 (3 marks): Reading the metadata from a file

Currently each of your 'restaurants' on the overview page have static/hard-coded metadata associated with them. Your first task on this Prac is to improve the main page by making it dynamic. All description items shown on the main page should be read from a file by using JSP (2 marks)

For example: The name of restaurants, addresses, phones numbers, thumbnail image URLs and detailed descriptions should be all recorded in a text file on the server.

```
My Thai Restaurant
113 Haig Road, Auchenflower
(07) 3217 7277
mythairestaurant1.jpg#mythairestaurant2.jpg#mythairestaurant1.jpg
One of the best testaurant in this area Hours: Monday   Closed Tuesday  5:30-9:30 pm Wedne
My Thai Kitchen
18/36 Baroona Road Milton
(07) 3369 8555
mythaikitchen1.jpg#mythaikitchen2.jpg#mythaikitchen3.jpg
```

As a challenge, modify this task by changing the functionality of the "More Info" button. You are required show a more detailed description of the corresponding restaurant on the overview page instead of opening a new web page (see the images below for an example) (1 Mark)

For example, once a user click on "More Info" button, a hidden section should be shown with all necessary details which describe a restaurant and the "More Info" button text should change to "Hide". Once the user clicks on the "Hide" Button, the description section should disappear and the "Hide" button should change back to "More Info".

Marks breakdown (3 marks total):

- All metadata is read from a file, and displayed on the page (2 marks)
- Detailed description shown on the overview page only when "More Info" button is clicked; "Hide" button hides the content again (1 mark)

Restaurants

Restaurants

Task 2 (2 marks): The Admin log-in page

Using JSP you should create a login page that has any appearance you like (example below). The login algorithm must be implemented server side with JSP sessions. The login form need only accept one set of credentials (username: 'admin', password: 'password'). On a correct login the user should be redirected to the Admin page. If incorrect credentials are entered a warning "Incorrect username or password" should be displayed on the login page and they may try again.

As with the client log-in if a user tries to navigate directly to the Admin page they should be redirected to the Admin log-in page.

Admin Login

Login

Password

☐ Remember me   **Login**

Marks Breakdown (2 marks total):

- Login session works using JSP sessions (1 mark)
- Incorrect username or password shown on the login page (0.5 marks)
- Navigating to an admin page when the user is not logged in as an admin, redirects the user to the admin login page (0.5 marks)

Task 3 (1 mark): The Admin Page

Using JSP you should create an Admin page for your "MyRestaurants" site. The admin page should primarily consist of a table listing restaurants (see example below) with the first columns for name of the restaurant. The last column of the table should be an 'Edit' button to allow admin users to modify the information of a restaurant (see Task 4).
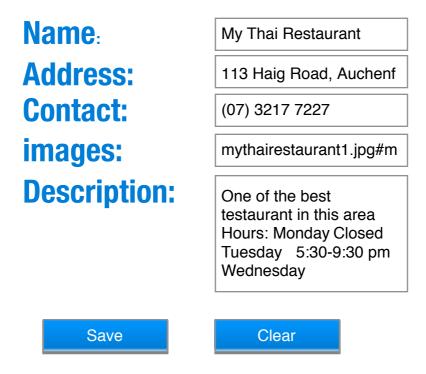
Marks Breakdown (2 marks total):
- Table listing restaurants with edit buttons/links (see Task 4) (1 mark)

My Thai Restaurant	Edit
My Thai Kitchen	Edit

Task 4 (3 marks): Edit Functionality

When an admin clicks the "Edit" button, a form should 'pop up' (see example) in the admin page. The pop up form should allow admin to modify the data/description of that deal.

The pop up form needs to be prepopulated with the current data of the corresponding restaurant. Input validation needs to be performed before data is saved into the file, i.e. name must be at least be 4 letters long and can not be empty.

Name: | My Thai Restaurant

Address: | 113 Haig Road, Auchenf

Contact: | (07) 3217 7227

images: | mythairestaurant1.jpg#m

Description: | One of the best testaurant in this area Hours: Monday Closed Tuesday   5:30-9:30 pm Wednesday

[Save]   [Clear]

Once the admin clicks on the "Save" button, all data within the pop-up form should be written to the appropriate file in server and the updated details should appear on the overview page.

Marks Breakdown (3 marks total):

- Edit form appears when clicking the "Edit" button (0.5 marks)
- Form is prepopulated with the current details of the restaurant (0.5 marks)
- Form is validated using JavaScript (1 mark)
- Metadata file is updated, and changes reflected on the overview page (1 mark)