# INFS3202/7202 Practical 5 - AJAX and JSON

## (6 marks)

#### Overview and objectives

Recall the search function implemented in Prac 4. Each search inquiry required a page refresh. In Prac 5 you are required to use AJAX to improve it with a dynamic display of search results.

Furthermore, you are required to implement a Facebook like comment system, which allows users to interact with the information presented.

You should be working on this practical in Week 9 and present the results to your Lab tutor during your scheduled Lab session in Week 10, beginning the 12/5/2014. The Prac could be done either in the Lab or at home but it should be deployed to the working zone. 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 two major tasks:

- Dynamically display search results (2 mark);
- Implement comments functionality (4 marks);

### **Preparation**

Before attempting this practical you should have a good working knowledge of HTML, JavaScript, AJAX, JSON, PHP, JSP as well as SQL and databases. Please ensure you that you have covered the material in Lectures 1-7. You can choose either JSP or PHP in Prac 5.

You may find this tutorial a good starting point for this practical:

http://www.w3schools.com/Ajax/ajax\_intro.asp

The following is the first in a series of video (a little old) tutorials on AJAX

http://youtube.com/watch?v=dtrWHL9Asec

As a reminder you should place any HTML, PHP and JSP files in the dedicated directory of your personal web server (zone): <a href="https://www/htdocs/">/war/www/htdocs/</a>

For the zones there is a copy of phpmyadmin already provided in your /var/www/htdocs/folder. If you visit http://infs3202-xxx.uqcloud.net/phpmyadmin (where xxx is specific to you) you can access this. The login to the mysql server (and thus to phpmyadmin) is the zone's name as the username (e.g., infs3202-xxx) and you will need to contact your tutor for root password. Conversely you may work from and present on your own machine (this may require you to install appropriate database software).

## Task 1 (2 mark): Dynamically display search results

The search functionality has been implemented in Task 3 Prac 4. In this task, you are required to modify this function to achieve dynamic page loading by using *AJEX*. In other words, the search results should be displayed without reloading the whole page (e.g., image 1-2).



Image 1-2

If no results match, you should dynamically display a message as "Sorry, no results matching your search were found" (e.g., image 1-3).

Car
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 $Sorry, \& o\& esults\& natching\& our \& earch\& were \& ound \\Image 1-3$ 

### Task 2: Implement Comments functionality (4 marks)

The following three sub-tasks can be implemented either by modifying the previous pages you created in Prac 1-4 or by creating similar pages in either PHP or JSP. In this task, you are required to display and add comments for a place by using **AJEX along with JSON**.

## Task 2.1 (1 mark): Modify database

To store the comments for each place, you have following two options.

<u>Option 1:</u> Create a new table, where each entry is one piece of comment. You need figure out the relationship between the tables storing places and the table containing comments.

Option 2: Create a new attribute named "comments" based on the original table. A special "separator" is needed to separate different comments to the same place.

## Task 2.2 (1 mark): Display Comments

Add the tab "Comments" beside description of deal (e.g., image 2-1). When it is clicked, all comments about the place should be displayed at the side or bottom of the place on the same page without reloading the whole page (e.g., image 2-2). You are required to at least have two comments for a deal.

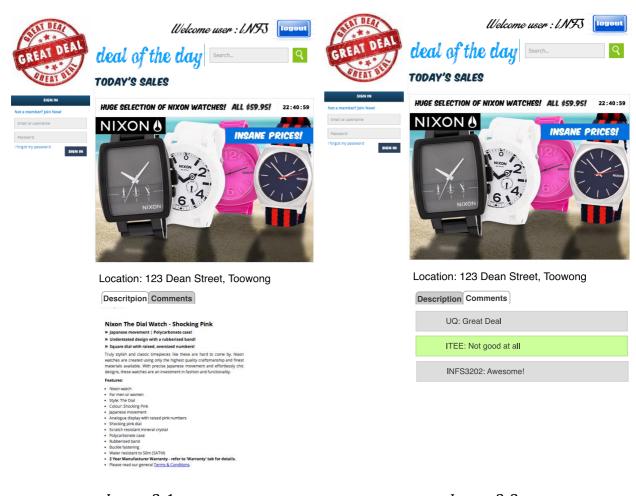


Image 2-1 Image 2-2

### Task 2.3 (2 marks): Add Comment

Add a add comment function within the "Comments" tag (e.g., image 2-3). The comment section should have a text field, an 'Add Comment' button, and a 'Cancel' button. When a user finished out the comment, by clicking the 'Add Comment' button the new comment should be added into the database, the text filed should be clear and all comments, including the new one should be displayed without reloading the whole page (e.g., image 2-4). The new added comment should be displayed at the end of the comment list. The 'Cancel' button allow a user clean up the text field.

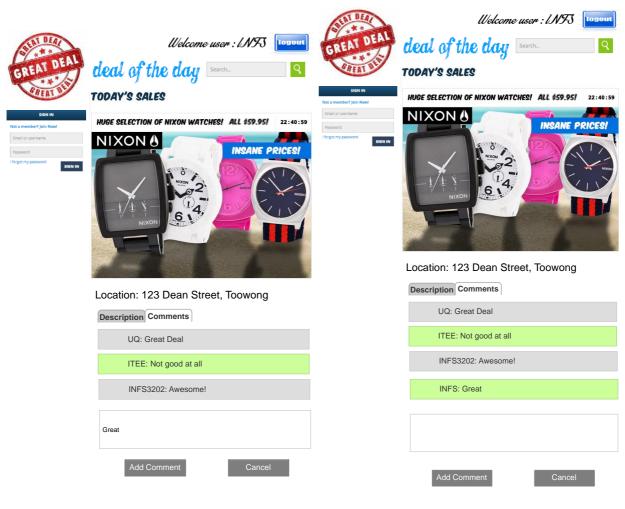


Image 2-3 Image 2-4