INFS3202/7202 Practical 6 – Google Map Integration

(6 marks)

Overview and objectives

The goal of this practical is to integrate Google map into your websites and to be able to use the map to indicate all places listed in your website/database. Either PHP or JSP can be used. This Practical counts 6 marks towards your overall assessment. You must present this practical to your lab tutor during your scheduled lab sessions.

You should be working on this practical in Weeks 10 and 11. You must present the results to your lab tutor during your scheduled Lab session in Week 12, beginning the 26/5/2014. The Prac could be done either in the lab or at home. You must deploy the Prac to the working zone and also **upload** the source 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 tasks:

- Dynamic location indication on the Google Map (3 marks);
- Show the search results on the Google Map (1 marks).
- Show the possible path to deal location.(2 marks).

Preparation

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

You may find this reference is a good starting point for this practical:

https://developers.google.com/maps/

The following is the first in a series of video tutorials on Google Maps API

http://www.youtube.com/watch?v=ZE8ODPL2VPI

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

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 password. Conversely you may work from and present on your own machine (this may require you to install appropriate database software).

Task 1: Dynamic location indication on the Google Map (4 marks)

In this task, you are required to modify the some webpages you created in Pracs 1-5 to implement a Google map. A Google Map should be displayed in the main page when it is loaded. (e.g., Image 1-1). **AJAX is required to be used to avoid reloading the whole page unnecessarily.**

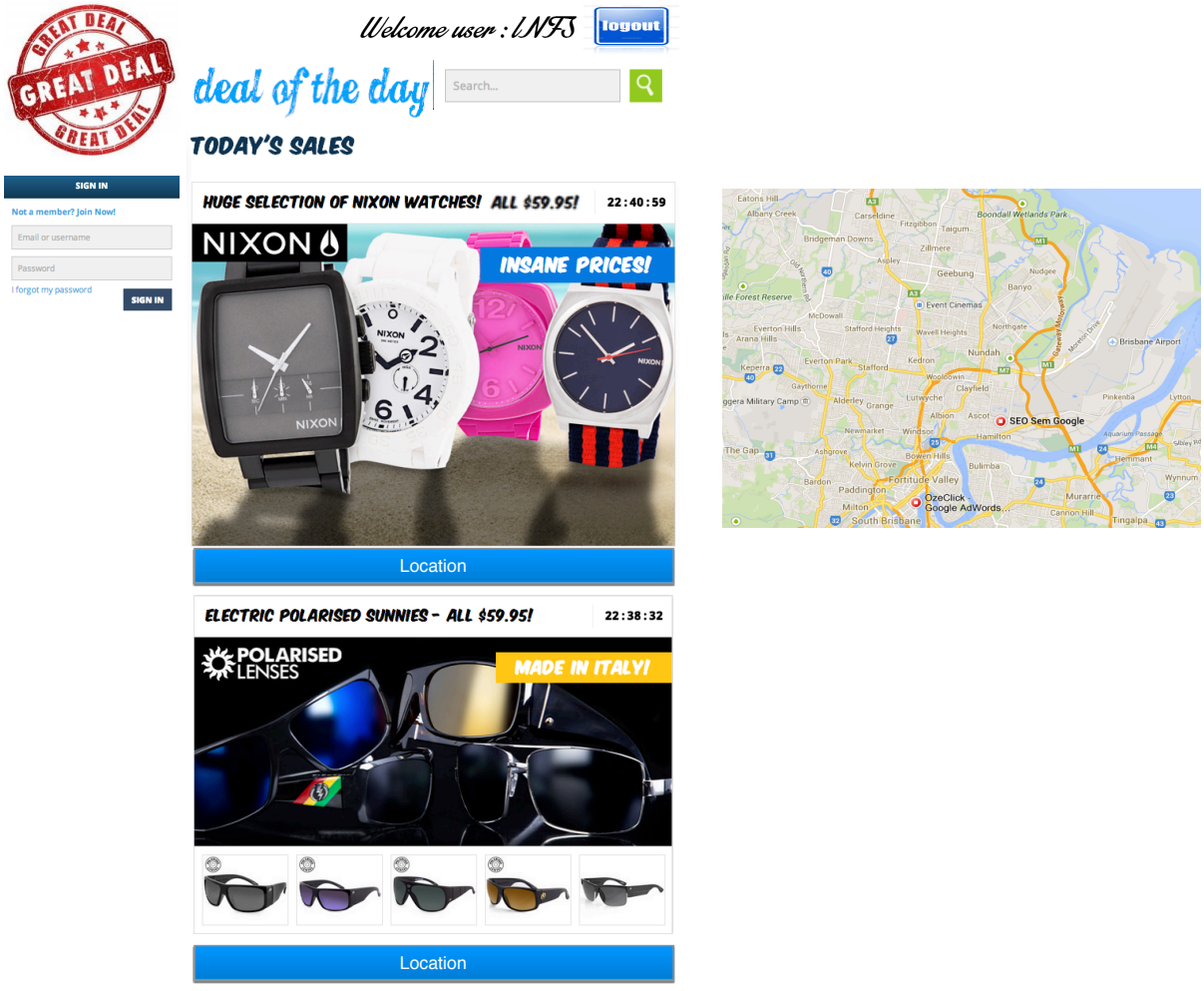

Image 1-1

Task 1.1 (2 marks): location indication

Add the button "Location" on top of the representative image of a location. When it is clicked, a place marker should be displayed on the map for its associated location without reloading the whole page in the Google Map (e.g., Image 1-2). You are required to show at least two places for demonstration.

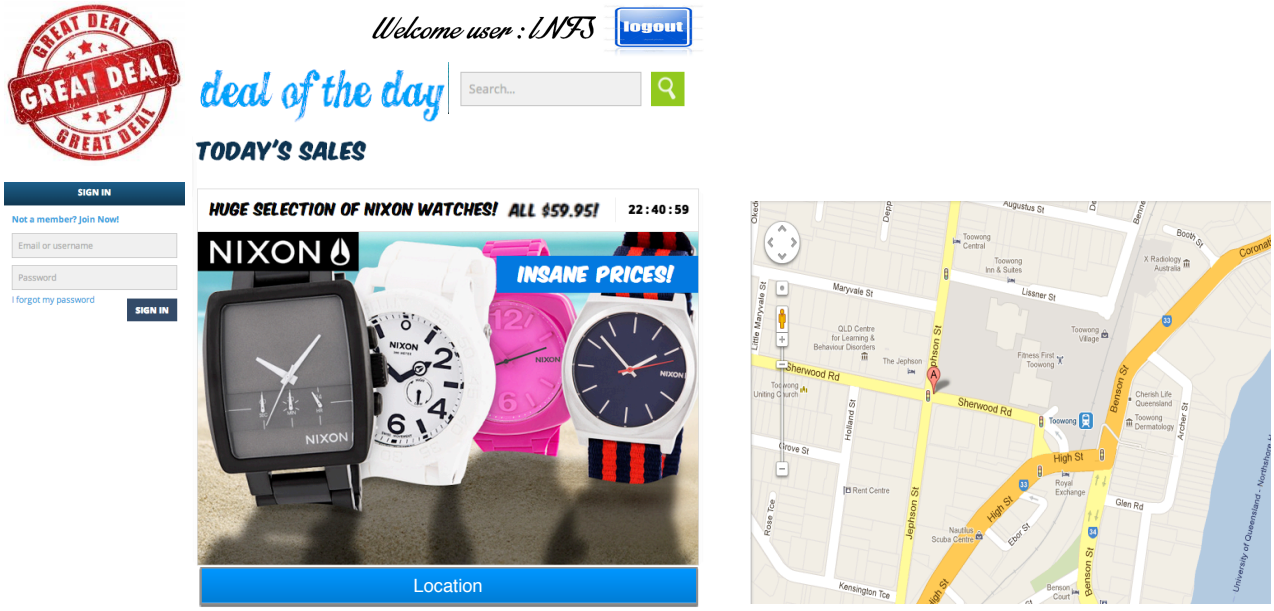

Image 1-2

Task 1.2 (1 mark): Dynamic location switch

Assume a location marker has been displayed on the map. When the 'Location' button of another place is clicked, the pervious marker should be removed from the map and a new marker should be displayed on the map without reloading the whole page

Task 2: Show the search results on the Google Map (1 marks)

In Pracs 4 and 5, you have implemented the search function for your deals. In this task, you are required to modify the search page by integrating in the Google map. All locations of the search results should be shown on one map (eg: Image 3-1). You are required have at least two locations for demonstration. **AJAX is required to be used in this task. Only the search results and the map should be updated for each search.**

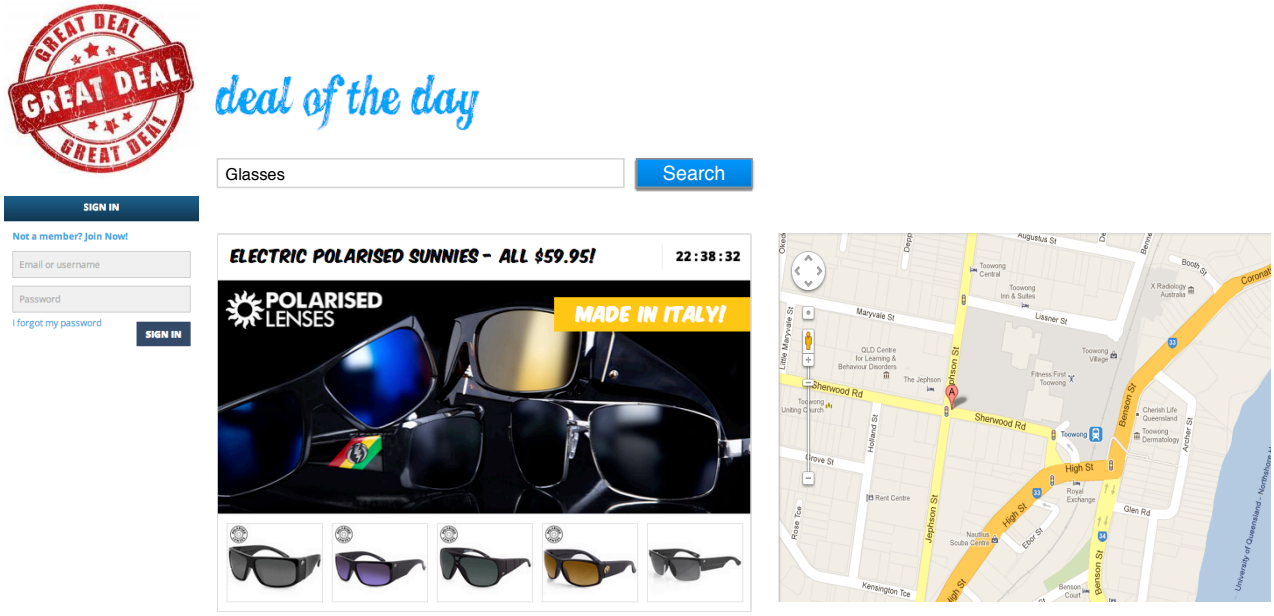

Image 2-1

Task 3: Direction to deal (2 marks)

Add anther tab named “Direction” on each deal page (eg: Image 3-1). Once a user click on the ‘Direction’ tab a Google map should be load and shown one possible path to the deal location base on the user current location (eg: Image 3-2).

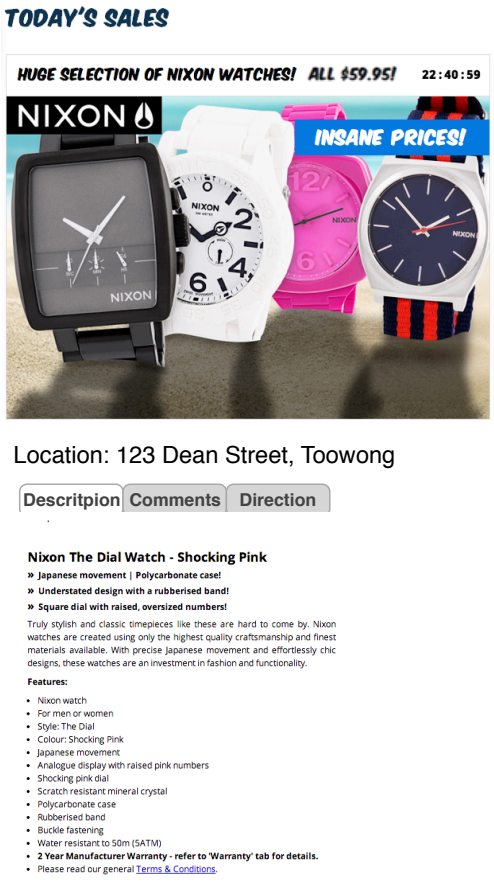

Image 3-1

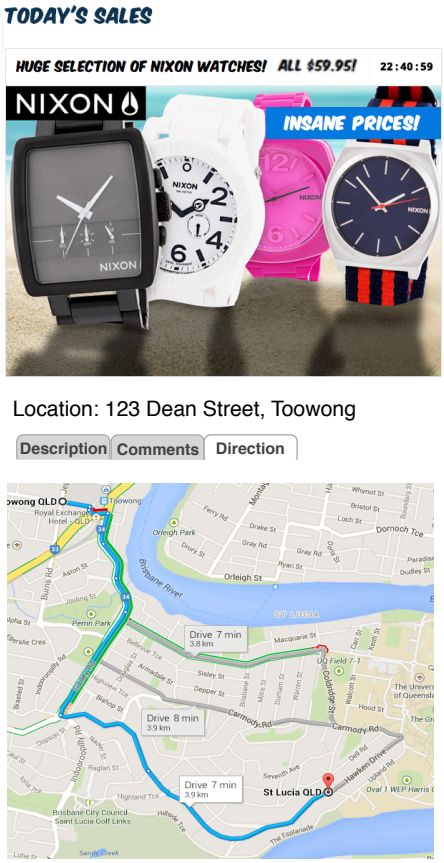

Image 3-2