GEOM90007 Information Visualisation Assignment 3 Report

**1 Targeted Users and Tools**

In this assignment, our targeted users are tourists that are going to visit Melbourne. Most of them are new to this city, and thus they need all kinds of information including restaurants, recreation places, public transportation routes and so on. In order to give them a user-friendly guide of the city, we decide to implement the interface on a webpage with simple html scripts. Therefore, the tourist can access the interface either from their laptop or their mobile device, giving them much convenience. Considering the practical user cases, we decided to use simple JavaScript code with Mapbox API to build our interface, and apply Yelp API to obtain more localized information. By simply clicking the sidebar and points on the map, the tourists can easily get what they want.

**2 Restaurants**

By clicking on the ‘Restaurants’ entry on the sidebar, the user can access all the information of the restaurants. There are two scenarios for the tourists:

(1) Searching particular restaurants by tags: Here we list more than 20 tags for the tourists, they can choose different tags and view the corresponding restaurants’ detailed information and geolocation by simply clicking the tag buttons then clicking the particular points on the map. Also, the user can see the nearby restaurants by clicking certain tags and relocating his/her position using the tool on the left-top of the map.

(2) Searching Keyword: If the user knows some key words about a particular restaurant, he/she can do some search using the input box and obtain the information matched by the Yelp API.

As for the design part of the ‘Restaurants’, firstly, we have to mention that all the data comes from Yelp. We build our Mapbox layers using static Yelp fusion data and make live requests if the user clicks on the points on the map. By doing so, the tourists can access localized and valuable information of the restaurants including their categories, ratings and comments made by other customers. Secondly, we used tags and search box design to guide the tourists to find their targeted restaurants, giving them clear directions and leading to easier decision making. Finally, we demonstrate our data in a classical style – interacting with the points and makers on the map. This kind of style not only clearly shows the geolocation and detailed information of these restaurants, but it also gives a user-friendly interface due to that it is quite similar to the interfaces of map apps which we frequently used in our daily lives.