Feedback Report Part-2

1. What tools are you using for making the project for example: eclipse, jframe, etc?

We have used Eclipse IDE for our project.

2. Have you made any changes to the data structure you have selected? If yes then why?

Yes, we have made changes to our linked list data structure. Firstly we created a Linked list for different categories and then inserted data according to different categories. But the lines of code were huge and complexity was increasing, so we used an inbuilt Linked list to store data in different categories and further access it.

3. What is the progress of your project? What have you accomplished in these 2 weeks?

We stored all data in the inbuilt Linked list. Then after searching for many solutions to find nearest locations we first implemented the Haversine formula to calculate the distance between two places by providing latitude and longitude. And then used findnearestLocations method to find nearest locations in ascending order of distance.

4. Did you face any problems in these 15 days and were you able to resolve them?

To choose the method to calculate distance between geographic locations Although a graph can also be used to represent the geographic locations and calculate the distances between them, it may not be the most efficient way to do so, especially when dealing with a large number of locations. The graph approach requires creating edges between all pairs of nodes, which can result in a large number of edges and a complex data structure.

On the other hand, the Haversine formula is a simple mathematical formula that can be used to calculate the distance between two points directly, without the need for a graph or any intermediate data structures. It only requires the latitude and longitude of the two points and some basic trigonometric calculations.

Therefore, the Haversine formula is a suitable and efficient method for calculating the distances between geographic locations, especially when dealing with a small to medium number of locations.

5. Did you make any major changes in the Project?

We have not made major changes in the code but as earlier we were using a user defined linked list but then we decided to go ahead with the inbuilt linked list.

