Project Members:

1. Laiba Zaheer(k180311)
2. Ruba Waqar(k181099)

Project name:

MAP with GUI(using windows form)

TOOLS:

Graph data structure

Searching algorithm

Breadth First Search or Dijkstra’s Algorithm(for finding shortest

GOAL:

The goal is to give graphic user interface of map where you can do following work

1. You can get the shortest distance from your place to any place you have entered for this you have to enter current and destination areas.
2. You will also be able to see the shortest route to your destination out of all the different routes from current to destination area.
3. You can get the nearest areas from your location for this you have to give your current location.
4. We are working on showing the full map but right now there is no way to show the map in GUI using windows form like the actual map looks like.so we will display all the location with their distance from other locations

Working :

We will work on C++.Locations in the map will be the specific location of restaurants only .For this we will put all the locations in graph where vertices will be areas and edges will be the distance between different locations. If the user enters a new restaurant it will first ask its distance from different restaurants in order to put it in graph and for the user on a map. Now to get the shortest distance between two restaurants we will use an algorithm not sure which one we have to study a lot for this but maybe breadth first search or Dijkstra’s Algorithm.For displaying different routes from one location to another we will use backtracking . Closest restaurant from current will be displayed by printing the vertices whose edge is connected with current vertices. At last , if we get a method to print it in map form we will show it in that way else we will print the vertices with their edges.