**Big O Analysis**

Main Window consists of most functions which run in O(n) since it retrieves their data from the SQL Lite database. An example of this can be seen from the updateRestTable() function, which essentially extracts a vector from the database wrapper class and outputs the Restaurant names into the Restaurant Table Widget in the admin panel(a for loop that iterates n times where n is the number of restaurants in the database). Our SQL Lite database has three major growth functions, which comprise of O(log n),O(n), and O((log n)^2). SELECT statements would be O(log n) because it is searching a binary search tree for the value we want . Since we use INSERT statements with parameters, this would increase our growth function initially from O(log n) to O((log n)^2). The same occurs with our UPDATE statements when we update the distances for each respective restaurant. Many of our functions use O(n) when traversing through the vectors because the input is dependent on the database data. Since we restricted the GUI to very little user inputs, the prominent growth function is O(n).