

## EECS 560 Lab #3

**1. Explain how this algorithm can help in application development.**

Utilizing the hashtable data structure for this application allows the application to operate efficiently. For instance, given a large hashtable size and efficient hashing function, the insert and lookup time will be  $O(1)$ . In essence, this means that if Bob's application's restaurant catalog were to grow, the hashtable's functionality would guarantee efficiency.

**2. Can you suggest a third factor which can be included in this kind of recommendation app? For example: the distance from your location**

If Bob's application were to grow and allow for a friend system within the app, then the factor of average friend rating for a particular restaurant could be utilized. For instance, a particular restaurant will have its current rating system; but additionally, it will provide the average friend rating for that particular location. This allows for a more unique factor to utilize within the hashtable scheme and reduce chances of collisions.