The Gray Owls Group Ibrahim Turkmen 150140002 163 Charming str, Dinosaur Ave, Uskudar, Istanbul

May 21, 2017 Mr. Neo Anderson Second Street No: 2012 Zion, Matrix

Dear Mr. Anderson,

My name is Ibrahim Turkmen and I am an engineer from the Gray Owls Group, my group and I have completed our project regarding the creation of a location finding program that presents the user with a list of establishments ordered according to how close they are to the user. As already mentioned in our proposal document, this program will undoubtedly enrich global economy while simultaneously providing free advertising to many overlooked establishments. Creating a good app is one of the best ways to contribute to society while making good profits. The experiments proposed to determine the performance of Insertion Sort, Quick Sort and Merge Sort have been conducted and completed successfully. As you already may know, sorting algorithms perform differently for different input types and array types (nearly-sorted or descending-ordered). Our group has inserted 20 arrays of varying size consisting of floats into the aforementioned sorting algorithms and made note of the time elapsed. The results of the experiments have shown that Merge Sort is the best algorithm to use when the array size is smaller than 675, Quick Sort is preferable when the array size is larger than 675 and Insertion is the slowest of all algorithms in all instances. Aside from the accident one our group members suffered and the two mosquitos that have tragically passed away, our project was completed without any problem. The program has been created and is now being beta tested.

I am writing to provide you with our project's final report consisting of more detailed information about why we chose to do this experiment, the methods and setup of our experiments, the results of the experiments and our opinions on them, a project evaluation and finally a satisfying conclusion. Live long and prosper.

Yours sincerely, Ibrahim Turkmen

P.S: Attached to this letter is our group's final report as well as a Data Sheet consisting of more detailed results of our experiments.