Team 11: Maintenance Cost of Project 4

For Project 3&4, Team 11 decided on creating a simple version of a restaurant deciding application that allowed the user to decide on which restaurant to choose in Lawrence. The code in itself is simple, it prompts the user on how they would like to choose their restaurant, either through price, rating, cuisine, or randomly. Depending on the choice made, the software manipulates a single data structure to figure out which choice or choices are best. The data structure is a simple vector made up of a Restaurant class, which stores the Restaurant’s name, price, cuisine type, public rating, or personal rating. The most difficult part of the project was the creation of the Graphical User Interface (GUI) where QT Creator was used.

Due to the simplicity and short amount of time that this project was created, the maintenance required is most likely very little or close to none. Starting with a cloud based server to run the application and store data, most companies pay $40 per month for adequate resources. However, this project is small and won’t require much resources. A cloud based server can be set up starting at $5 per month. Next for the application to be present on the Google Play Store and the Apple Store, the annual fees required are $25 and $99, the Google Fee is only a onetime fee at publishing of the product and so it won’t be added to the maintenance cost. Also, QT Creator costs $233/month to have access to its full extent. The restaurants that this project relies on is a website that is bound to be updated and evolve in a year. The chances that the relied-on website changes drastically are small, but the chances are still there. The website is not the only relied on component of this project, but also the Qt library. As a new version of the library may or does come out, it is also necessary to append or refactor how the code works in order to keep up with the changes and continue to keep working properly. It would also be a good idea to have someone fix bugs found throughout the use of the product as customers use the application and encounter problems that were not seen before. For this, a team of two developers would be best. It took 5 junior developers around 60 hours of work to complete the project, and so two developers to maintain and upgrade the project should be enough for the whole year. In a month, the two developers will be working on fixing bugs found by customers, updating the code to match how the website changes, and upgrading the software to match the Qt library update if there is any. It is plain to see that there will not be much work for these two developers to work on, so an estimate time of 14 hours per month or 7 hours for each developer is needed to make the necessary updates. The average salary of a Junior Application Developer in the U.S. is $59,515 for around 2080 hours of work. However, these developers will only work 84 hours each for the whole year, and so will only need compensated $2403.24 each. The total maintenance for this project is now at $7936-$8776 per year.