

## **Appendix**

### **Appendix 1: Interview With Client**

Me: What would make this a successful product?

Client: If this program can be used to make an accurate model on autocad, this product is successful.

Me: In what form should the output be?

Client: The output should be a text file with a series of commands and coordinates. Autocad is able to interpret the text file you give it as long as you commands and coordinates are accurate. Having an option that have raw coordinates would be good, but it is not optimal. Having a visual representation embedded into the program would be great, as it would allow you to view the shape without usage of autocad. But, the text file option is the best.

Client: How will the database function?

Me: The database will have two sections. First, there will be a table that stores the entries of the inputs. Next, there will be a table that stores all of the preferences of the program. User's file paths, etc.

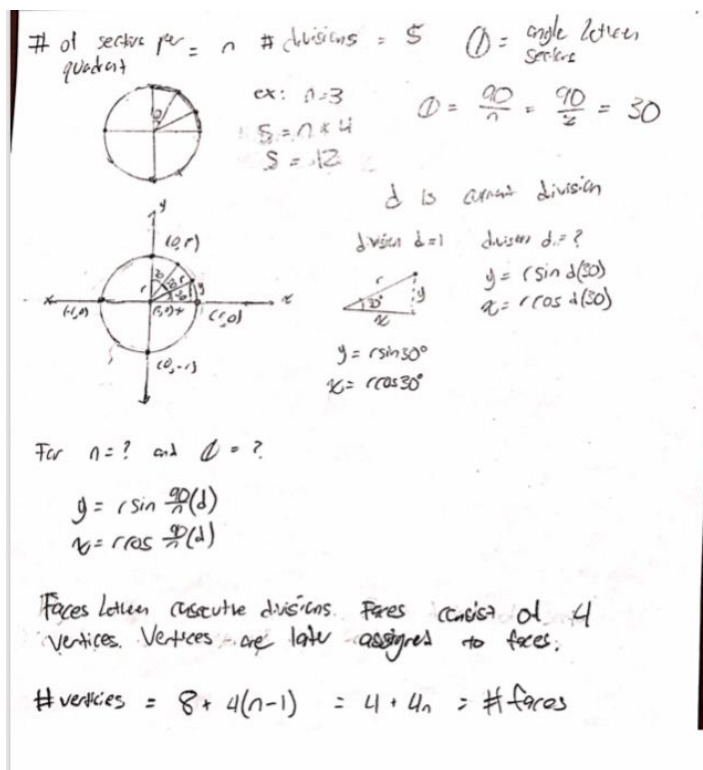
Client: Sounds good.

Me: How long does it take to do this process by hand?

Client: Anywhere from 30 minutes to 1 hour, depending on which shapes are being funneled and how many triangle sectors there needs to be for smoothness and accuracy.

Me: This program should be able to finish the shape in under a minute, with greater accuracy.

## Appendix 2: Iterative Process



## Appendix 3: Evaluation By Client

Client: Overall, this program is a success. It is able to accurately generate funnel scripts that save time and could increase workplace productivity. Database feature also allowed for easy

organization of funnel entries. This achieved the primary goals of the program, which was to decrease time spent creating funnel models, increase accuracy of funnel models, and allow for organization of funnel entries.

Client: The Settings page had defaults for windows, and was able to easily update script settings. The layout with the menu bar access and page was convenient and organized.

However, selecting the file path could have been made easier. When most programs ask the user to select a file path, they automatically open file explorer than require users to copy paste the path.

Client: The database could have been improved if it had the ability to update funnel entries (and instantly generate a script after the update). This would save a lot of time in the long run. The database could have also been able to delete multiple entries at a time, which would also save time.

Client: Program graphics on the input frame could be used to better display a preview of the shape profile the user is working on.

Client: The program could also be drastically improved if it was able to show the funnel output within the program as a 3D model (embedded Cad calculations), rather than creating a text script that can be read/used in Cad. Although this is quite futuristic.

Client: This program would also be improved if it could generate scripts that are compatible with all Cad software, rather than just Autocad.

