Final Project Report

Project Idea: Casino slot machine.

Idea Verified: Trevor Thomazin (LA)

For the final project of this class, I decided to create a gui that performed as a type of casino slot machine for the user. The intention of this is that this gui would display a set of boxes and a slider that can be interacted with. The boxes included a preselected number known as the "Target Number" and another one called "Randomly Generated Number" containing a randomly selected number and a third called "Gambling Money" showing your remaining money available. To add money to "Gambling Money", I included a push button that when used adds 0.75$ to the total every time it is pushed. The slider is used to control the value of the "Target Number" by scrolling left and right to pick a value between 1 and 10. Once you have selected your number between one and ten using the slider, you then have to pay the machine, honor code, to then pull the lever and try to match the target number and the random number with each other. When you accomplish this, you will be met with a "Congratulations" and a happy little smiley face.

Some difficulties that I had when doing this project was that I struggled to incorporate a third style. I was not sure what after I got the text style and the button style to do but I am happy how the slider turned out. It was challenging to figure out how to make the slide control the number in the target number box, but in the end I think I was just overthinking it.

Another struggle that I was having was trying to figure out how to organize my GUI. I wanted it to flow

in a user friendly way that would go hand in hand with the order of the steps. I think I accomplished this with the way that the commands are set up. Lastly, something else that I struggled on with this project was using the strings in the pushbutton commands. It was not very intuitive for me but through trial and error, I was able to get it figured out and make all of my intended functions work properly.

GUI's have a broad set of uses and could greatly benefit you throughout your career and schooling. They are very useful because they allow a person who is not familiar with coding to be able to communicate with the computer using the preset controls of the GUI. GUI's are used in many things beyond coding and computers, they are used in smartphones, gaming devices and much more. This makes them very flexible and therefore very useful. I could see myself using a GUI in school or even in my future career whatever that may be. Some examples of how I may use it would be things like creating a conversion calculator. This would be relatively simple to do but would be very beneficial if you had to do it very regularly, especially in more advanced college classes such as heat transfer. Another example that would apply that would be helpful in an engineering field is the GUI for a machine interface on something such as a CNC. Talking to other upperclassmen in the engineering program, they said uses such as this are very important and are very common in the

engineering field. I am happy with what I have learned in this class and I am excited to be

able to apply it to the career that I am pursuing.