Makenzie Manna

MSCS 630 – Milestone Report

Krypto Fun

With this project, my goal is to familiarize the "average Jane/Joe" with

cryptography. Not many people realize the multitude of ways in which you can

encrypt messages, images, etc. I aim to introduce some of the simpler forms/ideas,

specifically the Caesar Cipher. My application will be produced as an Android

application and is built using Android's Android Studio. The application will allow

the user to insert any "secret message" they wish. They will then be able to choose

the shift they would like to use to encrypt the message. As they move through the

different keys and decide which shift key they will use, the application will

dynamically show the user the encrypted message with every change of the key. This

method will allow the user to see exactly how the different shift keys affect the

encryption of their message. They could then share the encrypted message and key

with a friend and that friend can use the same application to decrypt the message.

Deciding which software to use to develop this project has been the most

difficult for me thus far. I did not originally want to use Android Studio because it

runs extremely slow on my laptop. I ended up deciding to use it due to the fact that

I didn't want to download another software and the fact that the Visual Studio I have;

I couldn't get to produce a Java project instead of C#. So, the lack of knowledge of

different programming languages really held me back in this aspect. Overall, I am

satisfied thus far with choosing AS, it provides great combination of options for both

design and functionality.

Currently, I have a solid foundation for the UI design of the application.

Developing the functionality behind the UI is where my focus resides. It took me a

little while to establish a meaningful UI that wasn't overwhelming or messy to the

user. I wanted the UI to be very simple and quite literal. The development of the

functionality of the application will take me a bit longer than the UI has. This is

because I am factoring in the time it will take for me to understand the concept of

combining both front and backend. This is not something I have done very often but

am excited to conquer.

All in all, I look forward to both the struggles and the euphoric feeling of

success you feel upon the completion of any difficult project. I plan on deploying

the application to my Android Tablet as well as having a couple friends who have

Android running smartphones for testing purposes. I am very interested to see if the actual method of what is happening in the backend relays to the user in the frontend, coming from someone without a background in computer science. That is my end goal, to be simple enough for the average person, but effective in introducing them to the ideas of cryptography.