Will Wainscott

Software Development I

Semester Project (Project 2) Proposal

File Encryption and Decryption Program

For my project I plan on creating a Java based program that will encrypt, and decrypt messages entered into a Java program. I will use the common public and private key encryption method. I think that using this encryption technique will be better than others because of its application to the current encryption and decryption methods that are being used currently in the industry. I will create a class that creates a set of one public and one private keys. These keys will be saved as separate files, so they can be used later in the encryption and decryption process. Once I do that, I will use the public key to encrypt a message of my choice. Once I have my encrypted message, I will run the program to decrypt it using the previously created private key. While all of the encryption and decryption will be demonstrated on my computer, I will design the program in a way that it could work across multiple computers. I plan on doing this by applying the encryption and decryption to an external text file. This way I could send the file, and still be able to decrypt the original message. I will also be sure to organize my code in classes that incorporate the many steps of the process into as few classes as possible, without creating messy classes with too much code. Additionally, I will pay special attention to all of my documentation, as I will want to easily read what is happening during my program. I think that this project will be challenging, but I am ready to do all of the necessary research in order to see that my program works both accurately and efficiently.