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Software development I

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### Filtered Messenger

The project I am proposing is a modification on a standard instant messenger. This program will have the capability to modify your sent messages according to specifications or added java classes. The program will have an option for an incoming and an outgoing filter. An example of an incoming filter is:

Sent message:	Filter:	Received message:
Hello there.	(Replace o's with 0's)	Hell0 there.

An example of an outgoing filter is:

Typed message:	Filter:	Sent message:
Hello there.	(Replace o's with 0's)	Hell0 there.

This program will allow fun interactions with friends where you can send or receive strange messages. This program will also allow for encryption. If the sender uses an encryption filter and the receiver has the decryption filter they can send encrypted messages. An example is:

Typed message:	Filter(Encryption):	Sent message:	Filter(Decryption):	Received message:
Hello there.	(Replace chars with ascii values plus 1)	073 102 109 101 112 033 117 105 102 115 102 047	(Replace ascii values minus 1 with chars)	Hello there.

I plan to accomplish this program with networking. I will use java libraries to help with the process. This project will require two instances of the program running that interact with each other. Each device will have a version of the program. The program includes a simple filter creator that allows for customizable simple filters to be made. If you want a very complex filter or custom encryption then you can create your own filter method to add to the program(it must be able to take in a string and output either a string or Array).

To conclude, this is a network based project using two instances of the program that interact by having a message (possibly)filtering it, sending it, the other machine receives it, (possibly)filters it and prints out the message.