

## SENG 360 – Assignment 3 - Cryptography

## Introduction to how to use the program:

**On server side, invoke:**

```
java SecureChat -server
```

After starting up, the server will ask for the desired configuration of security options (None, Confidential, Integrity, Authentication).

After waiting for client, enter the message. In this example the message is “Hello World!”

```
"C:\Program Files\Java\jdk1.8.0_66\bin\java" ...
Starting server.
Enter desired security options (CIA):
C
Waiting for client.
decrypting
Enter message: Hello World!
encrypting
Enter message:
```

**On client side, invoke:**

```
java SecureChat -client
```

After starting up, the client will ask for the desired configuration like above. Enter the configuration

After establishing the connection, the client will receive a message from server and attempt to decrypt it. In this example, it successfully decrypted String “Hello World!”

```
"C:\Program Files\Java\jdk1.8.0_66\bin\java" ...
Starting client.
Enter desired security options (CIA):
C
encrypting
Waiting for confirmation from server.
Connection established successfully.
Enter message: decrypting
XXXXXXXXXXXXXXXXXXXX received message: Hello World!
Enter message:
```