SSC (Communication and networking) Assignment 2: Concurrency (4% of your finally mark)

You are required to improve your email client done in assignment 1 using multi-threads.

# Requirements:

All features implemented in the first assignment must be retained. Based on those features, implement the following features:

* 1. To make your GUI more responsive and thread safe using multi-threaded programming (refer to my Concurrency in Swing lecture notes).
  2. Using a background thread to check whether there is any new email and:
     1. Notify the user
     2. Update the subject list
  3. Sending email using a separated thread

Apart from the above essential requirements, you can get bonus marks if you implement the following additional features:

* 1. Receiving/sending instant messages from/to Facebook Chat using XMPP protocol using separated threads
  2. Managing contacts using separated threads: you can add/delete/search contacts, e.g., name, email address, etc. (10%)

# Marking scheme:

**Readability (total 25%):** 10% for quality of code, e.g., program is generally readable and well organised. 15% Informative and concise comments

**Function (total 75%):** 75% for implementing all the features as required in 1.1-1.3: 25% for each feature.

**Bonus marks (total 20%):** You can get bonus marks if you can implement the additional features 1.4-1.5 (10% each):

**Submission deadline:** End of Week 9