Assignment 4
29.10.2014

SMTP Gateway

Purpose:

In this assignment, we will develop a SMTP gateway to filter emails before sending them to the real SMTP server. From the perspective of the user, your gateway will act as an SMTP server (i.e.: a customer thinks it interacts directly with a SMTP server).

The filter will be based on a list of keywords: unauthorized keywords will be stored in a text file, a mail containing a keyword in the title or its body will not be sent (or, alternatively, sent with a modified title/body). However, you must design the program in a way that you can easily extend it with additional filters later (for future assignments).

Layout:

Workstation (mail client) => SMTP Gateway (your program) => SMTP server (ISP or local)

Notes:

The actual SMTP server to use is hard-coded on your application (or determined at application startup). Though, you may choose to install your own local SMTP server for testing (or use the one from your ISP). There are several available as freeware / shareware (e.g.: http://www.softstack.com/freesmtp.html).

There's no need to implement the full RFC 2821 protocol, but simply "forward" all commands to the real SMTP server and intercept / change the ones we are interested in.

References:

RFC 2821 (or 821): SMTP
SMTP sample tutorial: https://hd.islandnet.com/view-article/79-pep-smtp-tutorial

Hand-In:

A demonstration of the software. The source files and project files must be submitted to the appropriate Ilias assignment.

Deadline:

One week (5.11.2014 – 14:00)