

University of Catania
Department of Mathematics and Computer Science
M.Sc. in Computer Science
Compilers - Academic Year 2014-2015

Mailing List Manager

Introduction

A mailing list is a service / tool offered by a network to various users and consists of an organized system for the participation of more people to an asynchronous discussion or for the distribution of information to interested parties / members by sending email to a list of e-mail addresses of registered users.

This document regards the description of a **Mailing List Manager** implemented in **C#** language with the IDE **Visual Studio 2010** with a **MySQL** database.

Source code and info are released under GNU GPL v3 licence and are available at the following link <https://github.com/R3m3r/Mailing-List>

Behaviour

The software has 8 functionality, accessible through a menu :

1. Import email addresses from files
2. Insert an email address
3. Delete an email address
4. Delete email addresses from file
5. Search and email
6. Export the database to .txt files
7. PING: check wich mail server respond
8. Exit

At every boot of the software it controls that a valid database is present, if not, will be created.

Subscribe operation

The functionality of processing of a directory allows to analyze and extract every valid email from a know path. File supported are **“.txt”, “.doc”, “.rtf”, “.cvs”**.

The method **Parse_Directory** allows to get in input a list of directory and by method **Parse_File** every file of directory will be parsed and added to database. Duplicate domains will be skipped (not emails).

Last but not least, the method **IsValidEmail()** checks that the email is valid, if it can be finally inserted.

Is also checked the length, in the case of email too long the **warning** table will be populated.

Unsubscribe operation

The elimination is performed by the function **Delete_Email_Address** taking out a single email, supported research that verifies that the email to be deleted is actually present.

Export Database into text files

This allows you to export the entire database on text files (with **“.txt”** extension) to a maximum of 500 lines each.

The export is done within a folder output, automatically created if not exists, which in turn contains a folder for each table present within the database. In particular, for each of the tables, a query is made to read all the emails contained in it. So you get an alphabetical list of all emails, so that will be written to file.

Also creates a special folder where warning is written to all the emails that have been reported as a warning and then inserted into the table. In this so you can view those emails that may have been corrupted due coding issues.

Ping of domain

This feature allows you to ping all domains of the emails found, to see which, besides being syntactically valid, are also actually working.

From any emails in the database is extracted and inserted in this domain table.

For each domain, the ping operation is performed with a maximum timeout of 5 seconds, after which the domain is not considered available.

After each ping a query is made to update this to put information on the response time or possibly set that domain as unreachable.

This does not means that the email is not valid, as many domains, although existing, do not respond the operation of ping.