
Mailing List System

Simplified Software Requirements Specification

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April 12, 2006**

Table of Contents

1. Introduction.....	1
1.1 Purpose.....	1
1.2 Document Conventions.....	1
1.3 Project Scope and Product Features.....	1
1.4 References.....	1
2. Overall Description	1
2.1 Product Perspective	1
2.2 Product Features	2
2.3 Users and user characteristics.....	2
2.4 Operating Environment.....	2
2.5 Design and Implementation Constraints.....	2
2.6 Assumptions and Dependencies	2
3. Functional Requirements.....	3
4. External Interface Requirements	3
4.1 User Interfaces.....	3
4.2 Hardware Interfaces	4
4.3 Software Interfaces.....	4
4.4 Communications Interfaces	4
5. Other Nonfunctional Requirements.....	4
5.1 Performance Requirements.....	4
5.2 Security Requirements	4
5.3 Safety Requirements	4
5.4 Software Quality Attributes.....	4
6. Other Requirements.....	5
7. Appendix A. Glossary	5
8. Appendix B. Narrative.....	6
9. Appendix E. DFD/DD	7
10. Appendix F. Data Dictionary.....	9
11. Appendix G. E/R diagram	10
12. Appendix H. Web Page STD.....	11
13. Appendix I. Use Cases.....	12
13.1 Login	12
13.2 Menu Secretary	13
13.3 Create List.....	13
13.4 Display List.....	14
13.5 Delete List.....	14

1. Introduction

1.1 Purpose

The current document describes the functional and nonfunctional requirements for Release 1.0 of the Mailing List System. This document is intended for use by the project team that will implement and verify the correct functioning of the system. Unless noted otherwise, all requirements specified here are considered “high priority” and committed for Release 1.0.

1.2 Document Conventions

The basic definitions used in this document are listed in Appendix A.

1.3 Project Scope and Product Features

The Mailing List System generates a list of labels with affiliates and their addresses. This list will be used by affiliates to mail to other affiliates when there is a notice of a meeting, special event, or an important notice. Through the system, the secretary is able to add and remove certain affiliates from the mailing list. The system also ensures that there are no duplicate addresses on the mailing list for one individual. The mailing list will be generated based on the frequency requested until it has reached its termination date.

The Mailing List System is completely defined in this document. However (1) the addition and removal of affiliates, and (2) determining the primary address of the affiliate, are outside the scope of this system. Further, some operational elements critical to the Mailing List System are accomplished outside of it.

1.4 References

Bill Stratton, personal contact.

2. Overall Description

2.1 Product Perspective

The Mailing List System is a stand-alone three tier web-based system that automates the current system of creating mailing lists (Appendix B). There are no plans at present to integrate this system with any other existing or proposed system. However, the system is expected to evolve over several releases. Thus enhancements, additional system features, and future linkage to as systems not yet described or defined are to be anticipated.

2.2 Product Features

The secretary is provided with a list of affiliates to send a mailing to. The secretary may then either search, or browse individuals, families, or organizations to add to the list. At any given time, the secretary is also able to remove an affiliate from the list. After all the additions have been completed, the mailing list will be displayed to the secretary. The mailing list will consist of all the affiliates selected; however, if an affiliate belongs to more than one area, such as a family and a group, the affiliate will only be mailed one copy. There will be no duplicate addresses on the mailing list.

2.3 Users and user characteristics

secretary	The secretary is identified, assigned an initial password, and given access to the system by the admin. The secretary must have internet access and access to the server that will house the system. The secretary that uses this system is responsible for changing their password and for generating the mailing list labels.
theDeveloper	The application developer. This person is responsible for developing the web interface along with the back-end database.
admin	The application administrator is responsible for the overall maintenance tasks of the database, including password resetting for end users.

2.4 Operating Environment

The Mailing List System System operates with the following web browsers: Microsoft Explorer 6.0 and Mozilla Firefox 1.5.

The Mailing List System web server operates on a Linux, Apache2, PHP5 and MySQL5 platform.

2.5 Design and Implementation Constraints

The system will use MySQL 5.0.18 or greater.

All HTML code shall conform to at least the HTML 4.1 standard and be W3C compliant.

All scripts shall be written in PHP, Version 5.1.2.

Source code conventions are outlined in the document *Mailing List System Conventions*.

2.6 Assumptions and Dependencies

System

The organization directory is made up of the names and USPS-acceptable addresses of persons.

A family is a set of one or more persons.

An affiliate is a family, an individual, an organization or a group. Each affiliate is associated with a person that is the contact for that affiliate.

The address of any external organization is the address of its' representative. Mailing to the representative is the same as mailing to the organization.

Exactly one member of each family is designated as "head of household" (HOH).

The address of any family is the address of its HOH.

A person can be a member of zero or more groups.

Exactly one member of each group is designated as "group spokesperson" (GSP).

The address of any group is the address of its GSP.

A mailing list is a set of USPS-addressable addresses.

A mailing list is given a name, a date of creation, the ID of the requester, the frequency and date of the mailing, and the termination date.

An address in a mailing can be directed to one of the following: (1) a person, (2) an HOH who accepts the mail on behalf of the family, (3) a GSP who accepts the mail on behalf of a group, (4) a representative who accepts the mail on behalf of their organization, (5) all members of a family, (6) all the members of a group.

Secretary

A secretary is the only user that can use the mailing list system.

Only one secretary may use the system at a time.

A secretary can add, delete or modify mailing lists.

3. Functional Requirements

The functional requirements are included in this document as Appendix I.

4. External Interface Requirements

4.1 User Interfaces

Navigation in this system will be accomplished through both buttons present on the web site pages. The system does not cache pages and the use of *forward* and *back* buttons to navigate through this site is not encouraged and may lead to unpredictable results.

4.2 Hardware Interfaces

No hardware interfaces are required.

4.3 Software Interfaces

No software interfaces are required.

4.4 Communications Interfaces

No hardware interfaces are required.

5. Other Nonfunctional Requirements

5.1 Performance Requirements

The system shall accommodate only one user at peak usage time. There are no other users of the system besides the secretary.

A single SELECT or INSERT query shall take no more than 3 seconds to execute; an UPDATE query shall take no more than 5 seconds to execute.

5.2 Security Requirements

The secretary can only login into the system to (1) create mailing list, (2) add affiliate to list, (3) remove affiliate from list, (4) delete mailing list, or (5) display mailing list.

Administrators can only login into the system to (1) reset the secretary's password, (2) perform administrative tasks.

The developer has access to all aspects of the logic of the system. It is assumed, however, the development will be done via well defined and tested test suites.

5.3 Safety Requirements

There are no safety requirements.

5.4 Software Quality Attributes

If the connection between the secretary and the system is broken prior to completion of the mailing list, the system shall allow the secretary to resume the process in the same state it was left in.

6. Other Requirements

None.

7. Appendix A. Glossary

TERM	DEFINITION
Secretary	The only user of the system. A secretary is responsible for creating and maintaining mailing lists.
Affiliate	An affiliate is a person, an organization, a family, or group.
Organization	An organization is an external company that is represented by an affiliate.
Family	A family is made up of multiple people that are related by last-name.
Individual	An individual is a single human being that interacts with the club.
Group	A group is made up of multiple people that have a common interest.
Address	An address is the location of where a person can receive mail.
Mailing List	A mailing list is a report that is generated with names and addresses.

8. Appendix B. Narrative

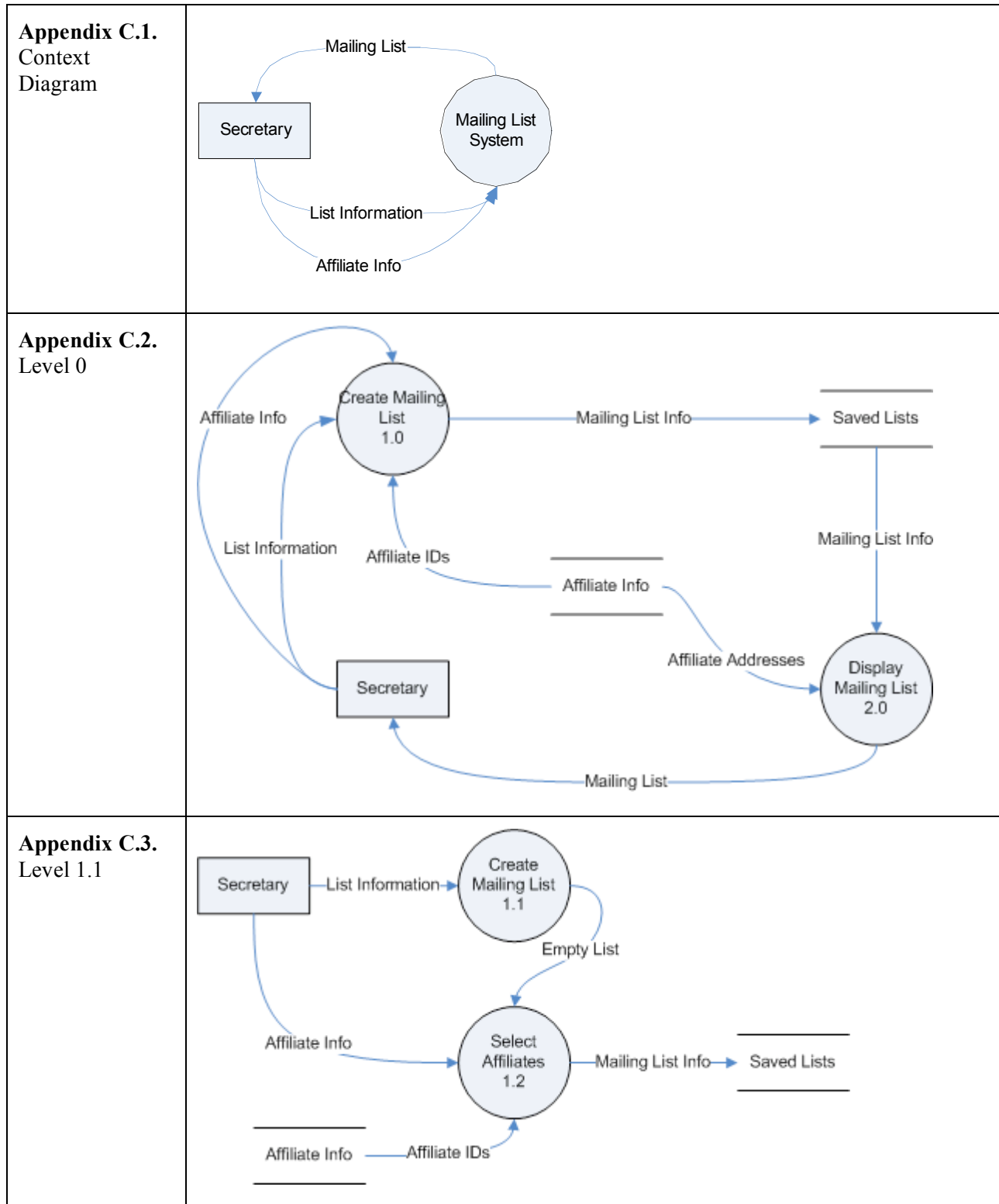
The Dance Club consists of many different affiliates. An affiliate is an organization, a group, a family, or an individual. An affiliate will call the secretary for the Dance Club and will request that a mailing list be created. This mailing list could be for meeting, special event, etc. The Dance Club secretary will create a mailing list with the requestor's name, the current date, frequency of how often this should be mailed, and termination date.

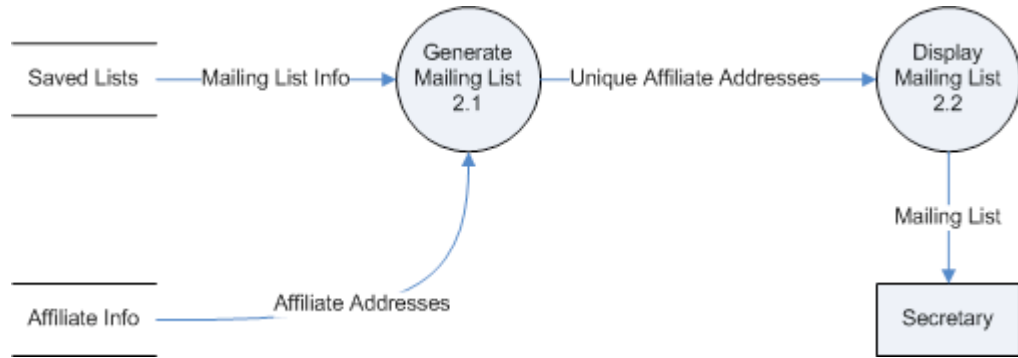
The secretary will then search and add to the mailing list organizations, groups, families, or individuals as requested by the requestor. If mailing to an organization, the mail will go to the Representative of the Organization. If mailing to a group, the mail will go to the Group Spokesperson. If mailing to a family, the mail will go to the Head of Household. If specified in the request, the mailing list could consist of all members of a group and all members of a family.

After all the additions have been completed, the mailing list will be displayed to the secretary. The mailing list will consist of all the affiliates selected; however, if an affiliate belongs to more than one area, such as a family and a group, the affiliate will only be mailed one copy. There will be no duplicate addresses on the mailing list.

The secretary also has the option to remove affiliates from the list if the requestor calls back and changes their mind. If the whole mailing list is no longer needed then the secretary has the option to delete the mailing list.

9. Appendix E. DFD/DD



Appendix C.4.
Level 1.2

10. Appendix F. Data Dictionary

Level 0

Affiliate Info = /* list of affiliates required to be mailed to */

List Information = requestor_id + creation_date + frequency + date_first + date_last

Mailing List Info = Affiliate IDs + List_Information

Affiliate IDs = 0{affiliate_id}n /* retrieved from database */

Affiliate Addresses = 0{affiliate_address}n

Mailing List = Affiliate Addresses + List_Information

Affiliate_id = /* unique numerical id that relates an affiliate to its attributes in the system */

Affiliate_address = affiliate_name + address + city + state + zip

Affiliate_name = /* name of the affiliate */

Address = /* USPS street address */

City = /* USPS city name */

State = 2{char}2 /* USPS statecode */

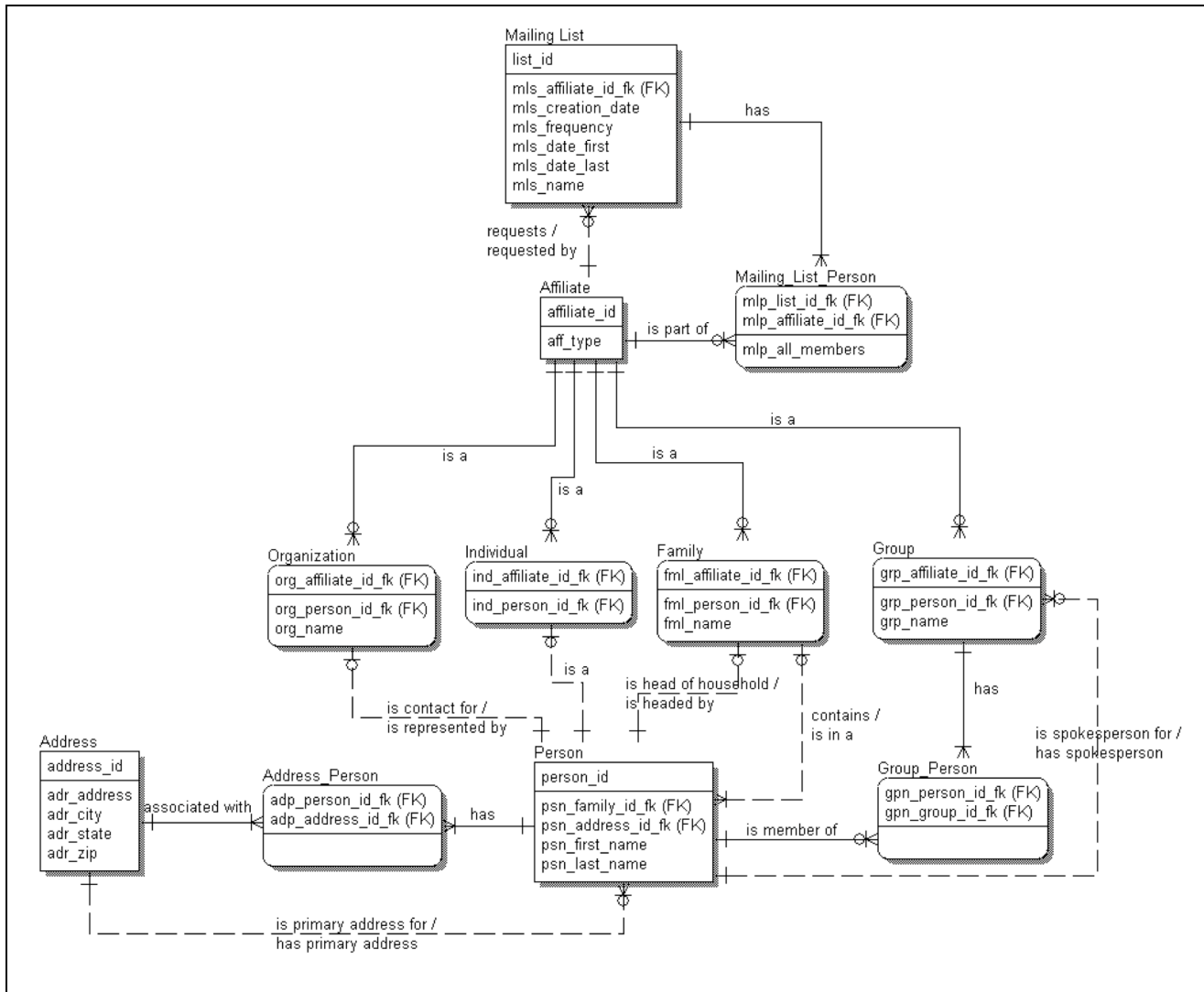
Zip = 5{integer}5 || 9{integer}9 /* USPS zip code */

Level 1

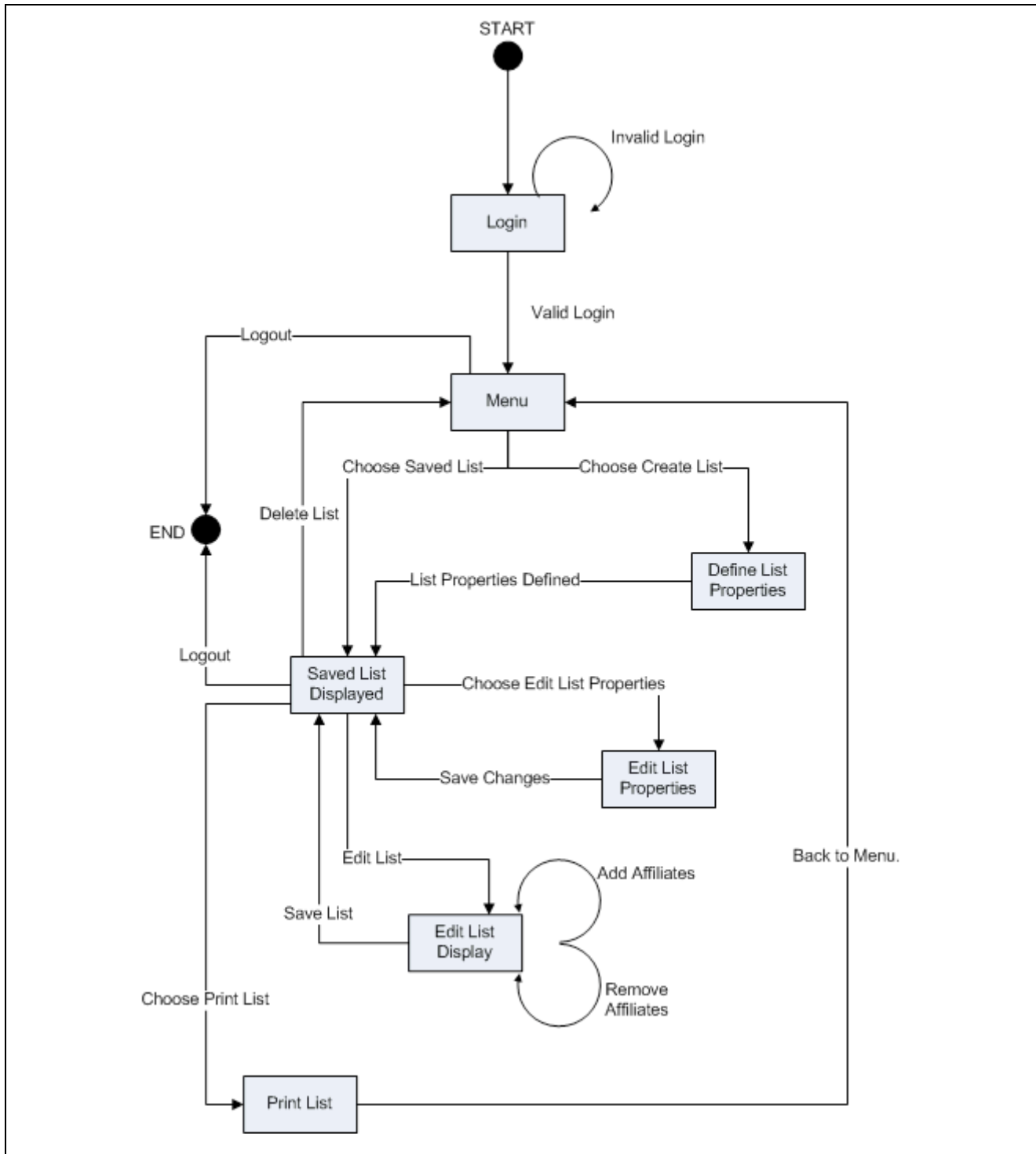
Empty List = /* Mailing list without any content */

Selected Affiliate Addresses = /* affiliate addresses that are associated with this mailing list (no duplicates) */

11. Appendix G. E/R diagram



12. Appendix H. Web Page STD



13. Appendix I. Use Cases

13.1 Login

Use Case ID:	1
Use Case Name:	Login
Actor(s):	Secretary
Description:	Secretary validation and system entry
Pre-conditions:	none
Post-conditions:	If the participant is a professor and is successfully validated, state MENU SECRETARY described in 13.2 is entered
Priority:	HIGH
Frequency of Use:	HIGH
Normal Course of Events:	When LOGIN occurs, secretary is requested to enter their valid userID and password. The system determines if both items have been entered. If they have been entered, system accesses the database and determines the validity of the user name and password.
Alternative Courses & Exceptions:	If either entry is missing, an error message is displayed and the LOGIN state is re-entered. If the secretary is not validated, an error message is displayed and the LOGIN state is re-entered.
Assumptions: (Business Assumptions)	
Notes & Issues:	

13.2 Menu Secretary

Use Case ID:	2
Use Case Name:	Menu Secretary
Actor(s):	Secretary
Description:	The secretary can choose what they want to do
Pre-conditions:	Secretary has logged in successfully
Post-conditions:	If create new mailing list is selected, then state CREATE LIST described in 13.3 is entered. If saved mailing list is selected, then state DISPLAY LIST described in 13.4 is entered. If delete mailing list is selected, then state DELETE LIST described in 13.5 is entered.
Priority:	HIGH
Frequency of Use:	HIGH
Normal Course of Events:	The secretary has the option to select a saved list, create a new mailing list, or delete a saved mailing list.
Alternative Courses & Exceptions:	
Assumptions: (Business Assumptions)	
Notes & Issues:	

13.3 Create List

Use Case ID:	3
Use Case Name:	Create List
Actor(s):	Secretary
Description:	The secretary can create a new list name and add affiliates to the list
Pre-conditions:	Secretary has selected to create a new mailing list
Post-conditions:	None
Priority:	HIGH
Frequency of Use:	HIGH
Normal Course of Events:	The secretary will created a mailing list name and enter the criteria for the list such as termination date, frequency, creation date. After the secretary has created the list then the secretary can add and remove affiliates from the list.
Alternative Courses & Exceptions:	
Assumptions: (Business Assumptions)	An affiliate can not have duplicate addresses on the mailing list.
Notes & Issues:	

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13.4 Display List

Use Case ID:	4
Use Case Name:	Display List
Actor(s):	Secretary
Description:	Secretary can choose a saved mailing list to open.
Pre-conditions:	Secretary has selected to use a saved mailing list
Post-conditions:	Secretary can print the mailing list.
Priority:	HIGH
Frequency of Use:	HIGH
Normal Course of Events:	The secretary can open a mailing list based on the name. The saved mailing list will already have a list of affiliates and their addresses stored. The secretary can then use this mailing list to print out labels.
Alternative Courses & Exceptions:	The secretary could open a saved mailing list to modify the criteria. They could also add or remove affiliates from the mailing list.
Assumptions: (Business Assumptions)	
Notes & Issues:	An affiliate can be removed from the database without the secretary knowing about it. The system must be able to handle when this exception has occurred.

13.5 Delete List

Use Case ID:	5
Use Case Name:	Delete List
Actor(s):	Secretary
Description:	The secretary can delete a list that has been created because it is no longer needed.
Pre-conditions:	Secretary has selected to delete a certain mailing list.
Post-conditions:	None.
Priority:	HIGH
Frequency of Use:	HIGH
Normal Course of Events:	The mailing list is no longer needed so the secretary can get rid of the list. This will delete the list and its information. The affiliates information will not be removed from the database.
Alternative Courses & Exceptions:	
Assumptions: (Business Assumptions)	
Notes & Issues:	

