SOFTWARE REQUIREMENTS SPECIFICATION

for

Online Postage Ordering System

Release 0.1.0

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Revision History

- 1. Team Moon Moon Needs No Revisions.
- 2. Team Moon Moon Never Makes No Mistakes.
- 3. Correction. Team Moon Moon "fails fast." Isn't that the new buzzword or buzzphrase?
- 4. The skeleton has been updated to reflect the actual requirements provided by Dr. Seaman.
- 5. It's all really coming together now.

1 Introduction

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1.1 Purpose

The purpose of this document is to present a detailed description of the specications and the requirements for a postage printing website. It will explain the purpose and features of the system, the interfaces of the system, what the system will do, the constraints under which it must operate, and how the system will react to external stimuli. This document is intended for both the stakeholders and the developers of the system.

1.2 Project Scope and Product Features

The objective of this project is to create and implement a website for printing mailing labels containing USPS postage. The website will be used primarily by registered users. The website will allow users to:

- Create and maintain individual secured accounts
- Buy/print postage labels
- List postage purchase history
- Check account balance
- Calculate postage rates
- Track packages
- Request refunds
- Check if an address is valid

1.3 Defintions, Acronyms, and Abbreviations

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1.4 References

IEEE Std 830-1998 IEEE Recommended Practice for Software Requirements Specifications. IEEE Computer Society, 1998.

1.5 Overview

The next section, the Overall Description, of this document gives an overview of the functionality of the product. It describes the informal requirements and is used to establish a context for the technical requirements specification in the next chapter.

The third section, Requirements Specification, of this document is written primarily for the developers and describes, in technical terms, the details of the functionality of the product.

2 Overall Description

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2.1 Product Perspective

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2.2 Product Functions

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2.2.1 Create An Account

The Create Account function shall allow a user to create a secure account. The account will track the users full name, mailing address, email address, credit card information, username and password, and the purchase history for up to two years.

2.2.2 Print Postage

The Print Postage function shall allow the user to print postage that has been purchased, either to a file or directly to a printer.

2.2.3 Buy Postage

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2.2.4 List Postage Transactions

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2.2.5 Get Postage Balance

The Get Postage Balance function shall allow the user to obtain their current amount in their postage buying account.

2.2.6 Calculate Postage

The Calculate Postage function shall allow the user to enter a name, address, package type, mail class, and weight. The user shall then be able to see a calculated postage amount to ship their package.

2.2.7 Track/Confirm Package

The track/confirm package function shall allow users to enter in a tracking number to see the status of their package.

2.2.8 **Login**

The login function shall allow account members to enter their username and password. When verified with the system database, users will be able to access restricted functions.[TBD] The login function shall provide users an option to reset their password.

2.2.9 Refund Request

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2.2.10 Validate Address

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2.2.11 Logout

The logout function shall allow the account user to exit out of their account for security.

2.3 User Characteristics

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2.4 Constraints

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2.5 Assumptions and Dependencies

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3 Specific Requirements

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3.1 External Interface Requirements

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3.1.1 System Interfaces

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3.1.2 User Interfaces

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3.1.3 Hardware Interfaces

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3.1.4 Software Interfaces

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3.1.5 Communication Interfaces

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3.2 Functional Requirements

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3.2.1 Create an Account

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3.2.2 Print Postage

The system shall...

- 1. First, ensure...
 - a) that there is a valid, logged-in user requesting the postage.
 - b) that the user is authorized to print the postage.
 - c) that the user has sufficient credit to print the requested quantity of postage.
 - d) that the user's printer is available and functional.
- 2. Then, the system shall prompt the user to confirm the printing of the postage, showing current and subsequent account balances as necessary.
- 3. Then, once confirmation from the user is obtained, the system shall generate the postage on a special page, devoid of any other content, that the user may print.
- 4. Finally, the system shall, upon detection of the completed print job, return the user to the "account status" page, where the new balance is displayed. The system shall also update the new balance in the user's account and add the job to the user's usage-history.

3.2.3 Buy Postage

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3.2.4 List Postage Transactions

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3.2.5 Get Postage Balance

The system shall...

- 1. First, ensure...
 - a) that there is a valid, logged-in user requesting the postage balance.
 - b) that the user is authorized to view the postage balance.
- 2. Then, the system shall find user account, and display postage balance in order for the user to see.

3.2.6 Calculate Postage

The system shall...

- 1. First, ensure that there is a valid, logged-in user requesting the postage balance.
- 2. Then, the system shall provide a method for the user to enter a Name, Address, Packaging type, mail class, and weight.
- 3. Then, the system shall calculate estimated shipping cost for the users package.
- 4. Finally, the system shall, upon completion of calculation, display the estimated shipping costs.

3.2.7 Track/Confirm Package

The system shall...

- 1. allow the user to enter in a tracking number.
- 2. check the tracking number with the system database.
 - a) if valid, the system shall display the current tracking information for the user to access.
 - b) if invalid, the system shall inform the user that the tracking number is not in the system database. The user may enter a tracking number or the user may cancel.

3.2.8 Login

The system shall...

- 1. require a username and password from the user.
- 2. verify the username and password with the system database.
 - a) If valid, the user will be granted access to the following functions: [TBD]
 - b) If the username is not located within the system database, the system shall inform the user that their username is invalid. The user may enter a different username or the user may cancel.
 - c) If password is not valid for the username entered, the system shall inform the user that the password is invalid. The user many enter a different password or the user may cancel
- 3. allow the user to request a password from the system to be emailed to the registered user.
 - a) The user can request a password from the system, provided the user gives the system a valid username from the system database.

- i. If the username is not within the database the system shall inform the user that their username is invalid. The user may enter a different username of the user may cancel.
- b) The system shall randomize a password and send to the users accounts email in the system database.

3.2.9 Refund Request

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3.2.10 Validate Address

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3.2.11 Logout

The system shall...

1. immediately disable access to functions that require a registered user.

3.3 Performance Requirements

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3.4 Logical Structure of the Data

IN-PROGRESS. Assigned to Preston Maness (me). I'm still working on a good way to diagram everything.

3.5 Design Constraints

Constraints for the postage printing website include

- Able to support PC, Mac platforms.
- System logs out user after ten minutes of inactivity.
- System supports all web browsers.

3.6 Software System Attributes

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