Software Requirements Specification





Version 1

Prepared by

IN CONDOM FI INO DO INDIVIDUO DI INDI

Yanyi Li 260470232

Ossama Samir Ahmed 260549558

Instructor: Robert Sabourin

Course Number: ECSE 428

Course Name: Software Engineering Practice

Project Teacher Assistant:

Date: 2015/01/25

Table of Contents

| 1 | Intr | odu | ction | 5 |
|-------|------|------|--------------------------------------|---|
| | 1.1 | Pur | pose | 5 |
| | 1.2 | Sco | pe | 5 |
| | 1.3 | Def | initions | 5 |
| | 1.4 | Ref | erences | 5 |
| | 1.5 | Ove | erview | 5 |
| 2 | Fun | ctio | nal Requirements | 6 |
| | 2.1 | Pos | tal Modes | 6 |
| | 2.1 | 1 | Domestic or International Mode | 6 |
| | 2.1 | 2 | Letter or Package | 6 |
| | 2.2 | Sen | ding a Package | 6 |
| | 2.2 | 2.1 | Sender and Receiver Address. | 6 |
| | 2.2 | 2.2 | Package Dimensions | 6 |
| | 2.2 | 2.3 | Package Weight | 6 |
| | 2.2 | 2.4 | Dimension and weight unit dimensions | 7 |
| | 2.2 | 2.5 | Viewing the most commonly sent items | 7 |
| | 2.3 | Sen | ding a Letter/Document(s) | 7 |
| | 2.3 | 8.1 | Sender and Receiver Address. | 7 |
| | 2.3 | 3.2 | Letter/Document(s) Dimensions | 7 |
| | 2.3 | 3.3 | Letter/Document(s) Weight | 7 |
| | 2.3 | 3.4 | Dimension and weight unit dimensions | 7 |
| | 2.4 | Edit | ting The Information Entered | 7 |
| | 2.5 | Ma | il Companies | 7 |
| | 2.5 | 5.1 | Viewing the companies | 7 |
| | 2.5 | 5.2 | Locating the nearest office | 8 |
| | 2.5 | 5.3 | Changing Currency | 8 |
| | 2.5 | 5.4 | Sorting Companies | 8 |
| | 2.5 | 5.5 | Visiting the Company's website | 8 |
| | 2.5 | 5.6 | Viewing Other Services Offered | 8 |
| | 2.6 | Lan | guages | 8 |
| 2.6.1 | | 5.1 | Changing the language setting | 8 |

| | 2.7 Us | er Help and Feedback | 8 |
|---|--------|-------------------------------------|----------|
| | 2.7.1 | User Help | 8 |
| | 2.7.2 | Submit Report | 8 |
| | 2.8 Ad | lvertisers and Sponsors | <u>c</u> |
| | 2.8.1 | Highlighted Results for Advertisers | g |
| | 2.8.2 | Clickable advertisements | |
| | 2.8.3 | Daily and Weekly Statistics | 9 |
| 3 | | inctional Requirements | |
| | | rformance | |
| | | Server Handling Requests | |
| | | ability | |
| | | Operating Systems | |
| | · | 0 - 1 | |

Revision History

Revision V1.0 (2015-01-25): First compiled copy of the SRS document.

1 Introduction

1.1 Purpose

The purpose of this software requirements specification document (SRS) is to provide the client a complete overview of the Mobile Postal Rate Calculator software, presenting all of the requirements provided by the client. Throughout the development process, source code will be uploaded and shared to GitHub and will be made available to the contributors of the project, as well as to the client for tracking purposes. The end goal of this project is to provide the client with a Mobile Postal Rate Calculator Software.

1.2 Scope

The Mobile Postal Rate Calculator is a software that will be used to calculate the rate of sending a package or a letter/document(s) as well as providing the user with various information about the different companies that can be used for sending his/her package or letter/document(s). The user can locate the nearest office of a specific company that he/she can use. This document will be read by Professor Sabourin, any affiliated TA may also read this document if they desire so.

1.3 Definitions

1.4 References

Canada Post Rates:"http://www.canadapost.ca/cpotools/apps/far/business/findARate?execution=e1s1"

1.5 Overview

The following sections of this document contain the overall description and the specific requirements for the Mobile Postal Rate Software. The overall description section gives a short and detailed description about the software. The Requirements Specification section shows a detailed description of each of the requirements needed to implement the Mobile Postal Rate software system.

2 Functional Requirements

2.1 Postal Modes

2.1.1 Domestic or International Mode

The user has the option to choose between sending a mail domestically or internationally. If the user chooses the domestic option, then he/she must choose the country where the sender and receiver address is. If the user chooses the international option, then he/she must choose the country from which he/she sending the mail as well as the country that the receiver address is.

2.1.2 Letter or Package

The user has the option to choose between sending a letter or a package. If the user chooses to send a letter, then some information specific for the letter being sent will be required to be entered. If the user chooses to send a package, then some information specific for the package being sent will be required to be entered.

2.2 Sending a Package

Once a user chooses the postal modes specified in section 2.1, he/she will be asked to enter the following information.

2.2.1 Sender and Receiver Address.

The user must enter the sender and receiver address to have the postal rate evaluated; these are required fields. The address must be in the Postal code form or a normal address form like the following: "3723 Sherbrook, Montreal, QC". If the user input is different than the specified formats, the software should alert the user and an error message appears. The user should be provided by a small description indicating the accepted address format.

2.2.2 Package Dimensions

The user must enter the length, width and height to have the postal rate evaluated; these are required fields. These values must be in a 3 decimal points format. If the user enters a value with more than 3 decimal places, the software will not give them error and will approximate the value to the nearest 3 decimal places to calculate the postal rate. If anything other than numerical characters was entered in these fields, the software should give an error message. The user should be provided by a small description indicating the accepted format.

2.2.3 Package Weight

The user must enter the weight to have the postal rate evaluated; this is a required fields. The value must be in a 3 decimal points format. If the user enters a value with more than 3 decimal places, the software will not give them error and will approximate the value to the nearest 3 decimal places to calculate the postal rate. If the weight exceeds 30 Kg or 66 lb (according to the unit chosen), the system should give the user an error message indicating the maximum allowed weight of packages. If anything other than numerical characters was entered in these fields, the software should give the user an error message. The user should be provided by a small description indicating the maximum allowed weight as well as the accepted format.

2.2.4 Dimension and weight unit dimensions

The user will be provided with the option of changing the unit dimensions of the length, width, height and weight. For the length, width and height, the user will be given the option to choose between centimeters and inches. For the weight, the user will be given the option to choose between kilograms and pounds.

2.2.5 Viewing the most commonly sent items

The user should have the option to view the most commonly sent items with their dimensions as well as their weight. This will give the user the opportunity of having an estimate of the package's dimensions and weight, without having to measure it. The user should have a guide or set of instructions of how to measure his/her package. The user should have the option of choosing his/her item without going through the list and then getting the information specifically for that item only.

2.3 Sending a Letter/Document(s)

2.3.1 Sender and Receiver Address.

Everything indicated in section 2.2.1 is applied here as well.

2.3.2 Letter/Document(s) Dimensions

The user must choose between a small envelope and a large envelope to have the postal rate evaluated; this is a required field. The user should be provided by a small description indicating the maximum allowable size of the small envelope and the large envelope as well.

2.3.3 Letter/Document(s) Weight

The user must choose between the weights ranges available in a list that fits his/her letter/document(s), to have the postal rate evaluated; this is a required field.

2.3.4 Dimension and weight unit dimensions

Everything indicated in section 2.2.4 is applied here as well.

2.4 Editing The Information Entered

The user should have the option of editing the information he/she entered after evaluating the postal rate, so that the user doesn't have to rewrite everything again. When the user chooses to edit the information. The old information should be auto filled.

2.5 Mail Companies

2.5.1 Viewing the companies

The user should see all the available mail companies that he/she can send the mail with to choose between them all. After the user inputs all the information required, the software should give a list of the mail companies available for this service according to the addresses primarily. Moreover, the software should give a rate summary of the mail as well as how long will it take to make the delivery for each company. If there is no company available to preform the service, the user is informed about the nearest location he/she can send the mail from. The user should have an option of viewing the list of

companies available to do mail delivery in his/her country and the rates of the most commonly sent items of each company as well as it's estimated delivery time.

2.5.2 Locating the nearest office

The user should be able to locate the nearest office of the mail company after he/she decides to use one from the list that will show up after entering the information required as indicated in section 2.3.1. If there is no company available to preform the service, the user is informed about the nearest location he/she can send the mail from. The user should have the option of viewing the cities that each company is available in, without entering any of the required information indicated in section 2.2.

2.5.3 Changing Currency

The user should have the option to change the currency before or after the postage is being evaluated. The default currency should be Canadian dollars.

2.5.4 Sorting Companies

The user should have the option of sorting the list of the available companies to use, according to the rate or the delivery days. The user also should have the option of sorting them in an increasing order or a decreasing order. The companies should be sorted according to their rate by a decreasing order.

2.5.5 Visiting the Company's website

The user should have the option of visiting any company's website once the list of the companies available to him/her is shown. The user should be redirected to the company's website that they chose.

2.5.6 Viewing Other Services Offered

The user should view all the other services offered by each company in the list with it's corresponding rate. The user can then choose any of the services and the rate summary will be updated. Services will depend on each company, some of the services are packaging, door pickup..etc.

2.6 Languages

2.6.1 Changing the language setting

The user should have the option of changing the language setting of the software, at any time. The default language should be English.

2.7 User Help and Feedback

2.7.1 User Help

The user should have the option to inquiry about any required field; each required field should have a help option beside it, for the user to choose if they need help.

2.7.2 Submit Report

The user should have the option to submit a report, which is either a bug or a suggestion to improve the software. This would allow the user to have a better experience with the usage of the software. The user will be asked about his/her email as well as the description and nature of the report. If any of the

required information is not entered, then an error message appears to the user asking him/her to complete the information required and submit it again.

2.8 Advertisers and Sponsors

2.8.1 Highlighted Results for Advertisers

Any carrier company that purchased the sponsored results package, will have it's company highlighted and at the top of the list, if it is included in any search.

2.8.2 Clickable advertisements

Any company that purchased an advertising space will have its advertisement shown every 5 minutes on the side of the application/website.

2.8.3 Daily and Weekly Statistics

Any Company that purchased an advertising space will have a daily and weekly reports about the geographical locations as well as the number of users who chose to get directed to the company's website through the application/website.

3 Non Functional Requirements

3.1 Performance

All performance related requirements are based off of computers and phones made after 2010.

3.1.1 Server Handling Requests

The server will handle at most 200 requests. Requests more than that will affect the performance as well as the respond time. The server should be able to respond normally to any request in less than 5 seconds. If any error has happened, a report is sent to the system administrator indicating the error. A frequent statistics about the respond time is sent to the system administrator.

3.2 Usability

3.2.1 Operating Systems

The Software Application can be operated on Windows, Mac and Linux computers as well as IOS and ANDROID phones.