Software Requirements Specification

Foreign Currency Buying

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# 1. Introduction

This section of this SRS document provides context for the rest of the document, including the scope of the project, the overall purpose, as well as definitions, abbreviations, and acronyms that will be used within the document.

## 1.1 Purpose

The overall purpose of this SRS document is to display and describe the detailed requirements for the “Foreign Currency Buying” software. This document will provide a list of user classes, scenarios, functions and constraints, as well as functional and nonfunctional requirements, in order to detail exactly what the software will need to do to function, and meet the standards of the client. The contents of this SRS document are prepared to be read by both a user to ensure it matches their needs, and the development team, as a description for the initial model of the software.

## 1.2 Scope

The “Foreign Currency Buying” Software is a web-based application that shall allow a user to purchase any combination or amount of foreign currency that is supported on the site. This will be done by using user created accounts to place orders of foreign currency for the users, and agent accounts to fulfill the orders for the foreign currency.

The site shall display information about foreign currencies available, their exchange rates, the user’s account information, and calculations on selected currencies.

After an order is placed, the user shall receive an invoice with information detailing the order, as well as how long it will take for it to arrive in their account.

The website shall be available and properly accessible for users on desktop computers, laptop computers, tablets, and cellular devices, and have differing displays for the mobile and desktop versions of the website. The site shall also be accessible in any of the commonly used modern web browsers.

The delivery agents of the website shall be able to fulfill orders using their agent accounts, with different permissions than the user accounts. For example, a user cannot see the status of any orders other than theirs, however, an agent can see the status of any orders assigned to them, so they may fulfill them.

These user accounts shall be created through the site’s registration page, with info provided by the user, while the agent accounts shall be created by admins of the website. The top admin account will be created at the initialization of the website itself, while admin’s can create other admin accounts beyond the top one.

This website shall require access to the internet for the user, as well as a user account, for them to access any of the features.

The software itself requires access to the internet, as well as access to the foreign exchange market API, where it shall fetch the information to update on the site, such as the exchange rate between currencies, and tax rates.

## 1.3 Definitions, abbreviations, acronyms

|  |  |
| --- | --- |
| **Term** | **Definition** |
| Customer | Someone who may be interested in implementing this software for their own business |
| User | Someone who interacts with the website with the intent to purchase foreign currency, and/or is not an admin nor agent |
| Agent/Delivery Agent | Someone who is able to fulfill orders and certify that an order has been delivered |
| Admin/Administrator | Someone who has increased access to the website and software in order to control and manage it |
| Site | Website / a collection of web pages |
| Web Browser | An application used to connect to and display websites. |
| API | Application programming interface |
| Foreign Exchange Market | A global market that keeps track of the exchange rates between different currencies |

## 1.4 References

[1] Sommerville, Ian. “Software Engineering 10th ed.”, Pearson, 2018.

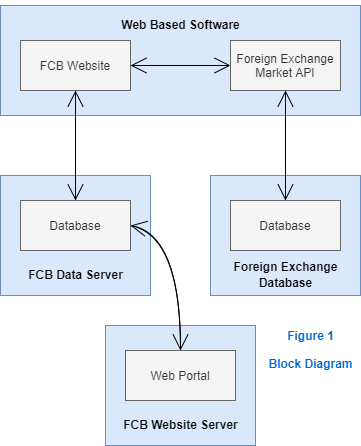
[2] "IEEE Recommended Practice for Software Requirements Specifications," in *IEEE Std 830-1998* , vol., no., pp.1-40, 20 Oct. 1998, doi: 10.1109/IEEESTD.1998.88286.

# 2. Description

This section of the SRS document will provide an overall look at the software system, and how it interacts with other software systems, and how they function together. It will also describe the different users that could be using this software, the functions of the software as a whole, and the constraints in place

## 2.1 Product Perspective

In this system, there is only one main website, containing multiple web pages, but there is also a web portal for admins of the site to complete any managerial maintenance that must be done, such as updating certain users in real time. The main site contains all the information and functionality to complete all of the required product functions for the product, while the web portal contains functionality for admin users exclusively.

The website will need to communicate with the Foreign Exchange Market API in order to retrieve foreign currency trading prices in real time and display them within the website. This API requires communication with the foreign exchange market servers, in order to supply the current prices with complete accuracy.

Within the system infrastructure itself, the website requires a connection to the system database, where data such as user accounts, past orders, pending orders, and user info is stored.

This database is also in contact with the web portal, allowing users on the web portal to change information in the data base at will, adding users, removing users, updating information, completing orders manually, and removing orders, assuming they have the correct credentials.

## 2.2 Product Functions

The “Foreign Currency Buying” site shall allow users to purchase foreign currencies following the creation and sign in of their user account. First, the user will be able to navigate to the log in or register page, where they can either log in with an existing account’s username and password, or create a new account, using their personal information, such as first name, last name, email address, billing info, desired username, and password.

Once the account has been created and the user has logged in, the site will show the landing page, which shall contain a list of the most commonly purchased foreign currencies, their exchange rates, and other foreign exchange market information about the specific currencies. The user shall be able to indicate how much of each currency they want, then navigate to a check out menu, where they place their order and receive an invoice. From this landing page, the website will also allow the user to cancel any pending orders they may have, or convert them to either a different currency, or a different amount of currency.

The website shall allow the user to manage their account, where they can adjust any information, except their username and their account type (admin/user/agent)

## 2.3 User Characteristics

The website shall provide an admin view, a user view, and an agent view, all with differing landing pages and permissions. These are also the 3 types of users on this website.

The admin view will provide access to the vast majority of the site’s management and controls, so the admins can ensure that everything is running as it should, and so they may adjust things within the site if they are not. The admin can also create other admin accounts and is the only user who can create agent accounts.

The user view is what was described initially in the product functions section, where a user can login, register, place orders for foreign currencies, see previous orders, convert and cancel previous orders, and manage their account.

The agent view of the website is exclusively for the delivery agents, where they can complete orders, mark them as delivered, and see the current pending orders waiting to be delivered.

## 2.4 Constraints

The website is constrained by the internet connection, as without a proper, stable internet connection for either the server or the client, the website will not work properly, if at all. This is a general constraint for any websites.

A more specific constraint that the website possesses in the dependency on the foreign exchange API. If the foreign exchange market servers are down, the website will cease working as intended.

Another constraint is the available capacity of the servers for the encrypted personal data of the users. If the server does not have enough physical hardware to store data, then new user accounts would not be able to be created, and it may cause issues with existing user accounts.

## 2.5 Assumptions and dependencies

An assumption about the website is that the foreign exchange API will always be stable and working, if not, the product will fail to work as intended. If the API goes down, or it is running slowly, that will affect the website directly.

Another assumption and dependency is that the web browser and computer that the user is using is fast enough and has a stable enough internet connection to properly load the website and it’s dependencies. If this is not the case, it may cause portions of the website, or the entire website, to cease functioning as intended for that one user.

## 2.6 Apportioning of requirements

If this project is delayed, some requirements (see appendix IV) may be delayed to a later release version.

# 3. Specific requirements

This section includes all specific requirements of the system and includes detailed descriptions.

## 3.1 External Interface Requirements

This section provides detailed descriptions of system requirements, including user interface prototypes and descriptions, and software and communication requirements.

3.1.1 User interfaces

If a user is a first-time user and wants to trade currency, they will see a login page when they enter the system. The user will click on their user type depending on if they are a user, delivery agent user, or an administrator. They will then be able to choose a “sign up” link, which is shown in figure 2. The user will create an account by entering their first name, last name, middle initial, mailing address, email address, phone number, and a default credit card, deposit account, or pay-pal information if applicable, as shown in figure 3. The first-time user will enter a username and a very strong password and will additionally have to upload a photo ID to verify their identity.

Once a user is registered, they will be able to manage their account by clicking on their profile where they can edit their account information except the username and type of user account.

Delivery agent users and admin users also have the option to create an account. If the user is an admin, they will see an option to create an admin account first and then they will be taken back to the login page where they will have the option to create a delivery agent account. Only admin users can create a delivery agent user account.

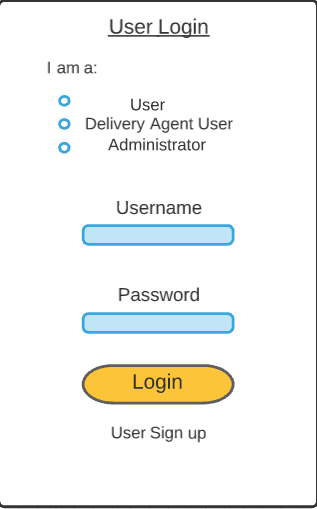
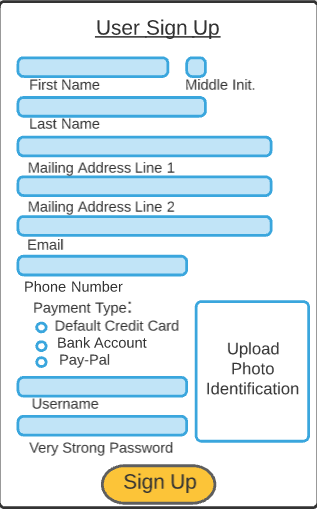
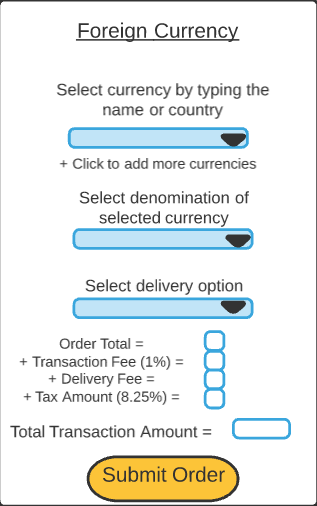
  

Figure 2 - User Login Figure 3 – User Sign Up Figure 4 – Main Ordering Page

Delivery agents can log into their account using the “login” page where they click on a link to the “certify receipt of delivery” page where they type in a transaction id, clicks on an option that marks the transaction as delivered in the system, and receives a signature from a user. The system will mark this transaction as completed.

If a user is not a first-time user, they will first see a login page when they enter the system. They will enter their username and password, and then they will be taken to the main page where they can select the foreign currency by its name or by its country, as demonstrated in figure 4. The user will also be shown the current exchange rate and will be able to choose additional currency to buy. The user will choose the denomination of currency and their delivery option using a drop-down menu. The user will then be able to see the total transaction amount including the transaction fee, delivery fee, and tax amount. The user will be able to edit their selections and will see the reflected total at the bottom of the screen. Once they are satisfied, they shall submit the order.

Once a user has requested an order the transaction will be in a gray period where they will be able to cancel a transaction if needed. Once the user is on the “cancel transaction” page, they will either type or select the transaction number from a drop-down menu and submit the cancellation by clicking the button at the bottom of the screen, as demonstrated in figure 5. They will also be able to see if they are within the gray period or not. During the gray period the user can also click on another link to change the currency type.

A user also has the option to submit issues or problems about transactions. After clicking the link to the “submit issues” page, they will type in their transaction number and a brief description of the problem. They will also be able to check on the status on of their submitted issues by clicking on the link above the submit button, as demonstrated in figure 6

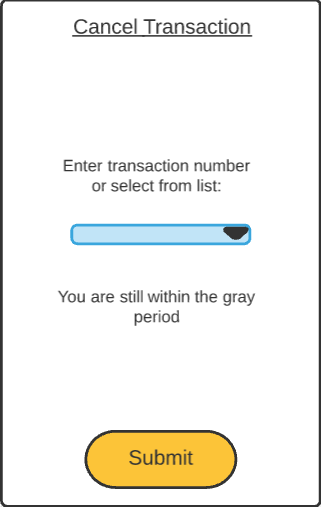
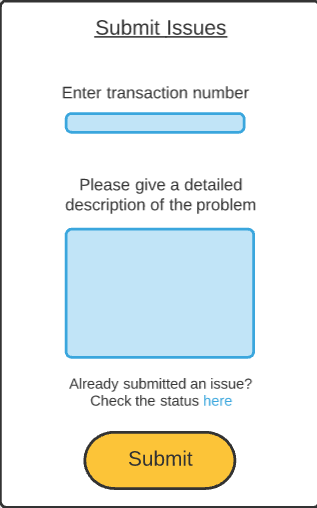
 

Figure 5 – Cancel Transaction Page Figure 6 – Submit Issues Page

## 3.1.2 Software & Communication Requirements

The application needs to be able to communicate with the various foreign markets in order to get accurate information about the various currencies that a user could purchase on the application. The information should include but not be limited to what country the currency is from, what is its value compared to gold and the U.S dollar and should also include a historical trend which that currency has been valued at. The communication between the application and the various foreign databases and the web portal consists of operation concerning both reading and modifying the data, while the communication between the database and the mobile application consists of only reading operations.

# 3.2 Functional requirements

This section includes the requirements that specify all the fundamental actions of the software system.

## 3.2.1 User Class 1 – The User

3.2.1.1 Functional requirement 1.1

**ID: FR1**

TITLE: User Registration

DESC: Given that the user has accessed the website, then the user shall be able to register an account through the website. The user must enter first name, last name, middle initial, mailing address, email address, phone number, as well as either a default credit card, deposit account, or pay-pal information.

RAT: In order for a user to register on the website

DEP: None

3.2.1.2 Functional requirement 1.2

**ID: FR2**

TITLE: User log-in - Website

DESC: Given that a user has registered, then the user should be able to log in to the website. The website shall ask the user if they wish to be remembered on the log in device so that in the future the user can be logged in automatically.

RAT: In order for the user to log in to the website.

DEP: FR1

3.2.1.3 Functional requirement 1.3

**ID: FR3**

TITLE: Search - Website

DESC: Given that the user is logged in to the website, then the user is immediately presented the search page. The user shall be able to search for any foreign currency or country. This is done through a free text search option.

RAT: In order for a user to search for a currency.

DEP: FR2

3.2.1.4 Functional requirement 1.4

**ID: FR4**

TITLE: Search result in a list view - Website

DESC:

· Search results shall then be displayed on a list. The list shall display the most accurate results first according to the user's search.

· Each currency listed shall display the current exchange rate.

· There should be maximally 30 results displayed.

RAT: The way results are displayed in a list.

DEP: FR3

3.2.1.5 Functional requirement 1.5

**ID: FR5**

TITLE: Purchase options - Website

DESC: Given that the user has found a desired currency, then the user should be able to select it to display several purchase options. Purchase options should include:

· Amount of currency

· Denomination mix

· Delivery option

The user can type in the amount of currency. The denomination mix and delivery option can be selected in a dropdown box by the user.

RAT: In order for the user to purchase desired currency.

DEP: FR4

3.2.1.6 Functional requirement 1.6

**ID: FR6**

TITLE: User account management - Website

DESC: Given that the user is logged into his/her account then the user shall be able to click edit profile. The user shall then be able to edit all information except the username and type of account.

RAT: In order for the user to make changes to their account.

DEP: FR2

3.2.1.7 Functional requirement 1.7

**ID: FR7**

TITLE: Add to cart - Website

DESC: Given that the user has selected and entered purchase options, the user shall be able to add the selected currency to their cart. The currency is then added to their cart and the user shall be able to continue searching the list. The cart continues to display the amount of currency added while the user continues to search.

RAT: In order for the user to add currency to their cart.

DEP: FR5

3.2.1.8 Functional requirement 1.8

**ID: FR8**

TITLE: Retrieve password – Website

DESC: Given that the user has registered, then the user should be able to retrieve his/her password by email.

RAT: In order for a user to retrieve his/her password.

DEP: FR1

3.2.1.9 Functional requirement 1.9

**ID: FR9**

TITLE: Search no match found - Website

DESC: If no match is found after searching for currency, then the user should be notified while the search bar is still available so that a new search can be performed.

RAT: To notify the user of not match and to conduct a new search.

DEP: FR3

3.2.1.10 Functional requirement 1.10

**ID: FR10**

TITLE: Go to cart - Website

DESC: The user can select check out when they are done adding currency to their cart. The following is displayed:

· The total transaction amount

· A transaction fee of 1% of the purchase

· A delivery fee (flat rate of $10.00)

· A tax amount (8.25% of the total purchase

The user can edit his/her selection and the transaction total should recalculate.

RAT: To provide the user with the specifics and total transaction amount.

DEP: FR7

3.2.1.11 Functional requirement 1.11

**ID: FR11**

TITLE: Checkout - Website

DESC: The user can select confirm purchase after they are made aware of their fee’s. If the transaction is cleared then the user is immediately emailed an invoice for the transaction. The following is listed on the invoice:

· All input information

· Transaction id

· Duration of the gray period

RAT: To allow the user to purchase and provide the user with an invoice

DEP: FR10

3.2.1.12 Functional requirement 1.12

**ID: FR12**

TITLE: View Transactions - Website

DESC: Within the user profile settings the user shall be able to see a list of their transactions. A search bar shall be available in which the user can enter their transaction id. The user shall be able to view previous transactions as well as the remaining gray period.

RAT: So that the user can manage previous transactions.

DEP: FR11

3.2.1.13 Functional requirement 1.13

**ID: FR13**

TITLE: Edit Transactions - Website

DESC: While viewing a previous transaction the user shall be able select edit if the transaction is within the gray period. This allows the user to cancel or convert a transaction. The following applies when selecting cancel transaction:

· The user is notified that funds are not withdrawn from their account until the gray period is over.

· The user is notified that only a cancellation of 1% of the total purchase plus tax is charged.

The user is then notified that the transaction was cancelled.

The following applies when selecting convert a transaction:

· The user can change the line items in the transaction

· The amount of currency ordered and the currency selected

· The user is notified that a conversion fee of $25 will be added to the new total.

· The user is notified that the gray period is not changed, and the currency will be shipped on time.

The user is then notified that the transaction was converted.

RAT: To allow the user to cancel or modify transactions.

DEP: FR11, FR12

3.2.1.14 Functional requirement 1.14

**ID: FR14**

TITLE: Submit issues - Website

DESC: When viewing transactions, the user shall be able to submit issues on previous transactions. When clicking submit issue the user:

· Must include the transaction number

· Must include a description of the problem

After submitting an issue, the user shall be able to see previously submitted issues and if they are considered open or closed.

RAT: So that the user can submit issues on previous transactions.

DEP: FR11, FR12

3.2.1.15 Functional requirement 1.15

**ID: FR15**

TITLE: Submit Validation Photo - Website

DESC: When creating an account the user is notified to upload photo ID in the form of driver's license or passport. The user is notified that he/she will not be able to make transactions on the website until the photo is verified by an admin. The user shall be able enter account management and click on upload photo. The user shall be able to upload a jpg file of the front of their id.

RAT: So that the user can verify their identity.

DEP: FR1, FR6

## 3.2.2 User Class 2 – The Delivery Agent

3.2.2.1 Functional requirement 2.1

**ID: FR16**

**Feature: Request account**

In order to request an account

A delivery agent

Should request an account on the website

**Scenario: Required information for registration**

Given the delivery agent wants to create an account

And the delivery agent does not have an account

When the delivery agent registers on the website by providing an email address

And password

And address

And phone number

And name

Then the delivery agent should be able to apply for verification threw the admin.

**Scenario: Confirmed registration**

Given the delivery agent has applied for verification

And has not yet received a confirmation e-mail after registration

When the delivery agent receives a confirmation e-mail from an admin

Then the delivery agent should be able to log in

3.2.2.2 Functional requirement 2.2

**ID: FR17**

**Feature: Delivery agent log-in**

**Scenario: successful log-in**

Given the delivery agent wants to log in

When the restaurant owner logs in with his/her account

Then the restaurant owner should be logged in as a restaurant owner

**Scenario: Retrieve password**

Given the delivery agent wants to log in

And does not remember the password

When the delivery agent enters his/her email address and selects “Retrieve Password”

The delivery agent shall receive an email containing the password.

3.2.2.3 Functional requirement 2.3

**ID: FR18**

**Feature: Certify delivery**

Given the delivery agent is logged in

When the delivery agent wants to certify a delivery

Then the delivery agent should be able to certify a specific delivery

**Scenario: Verify delivered currency**

Given the delivery agent is logged in

And the user provided signature input

When the delivery agent enters the transaction I.D

Then the delivery agent can verify the delivery

**Scenario: Verify delivery is active**

Given the delivery agent is logged in

And the user has not provided signature input

When the delivery agent enters the transaction I.D

Then the delivery agent can mark the delivery active

## 3.2.2 User Class 2 – The Admin

3.2.3.1 Functional requirement 3.1

**ID: FR19**

**Feature: Initialize top admin account**

**Scenario: Create top admin account upon system initialization**

Given the system has just initialized

When the system verifies top admin

Then the admin enters their name

And email address

And phone number

And password

Then the top admin is verified and initialized with the system

3.2.3.2 Functional requirement 3.2

**ID: FR20**

**Feature: Create admin account**

**Scenario: Required information for registration**

Given the admin wants to create an account

And the admin does not have an account

When the admin registers on the website by providing an email address

And password

And address

And phone number

And name

Then the admin should be able to create an account.

**Scenario: Confirmed registration**

Given the admin has created an account

When the admin has received a confirmation e-mail after registration

Then the admin should be able to log in

3.2.3.3 Functional requirement 3.3

**ID: FR21**

**Feature: Verify delivery agent account**

**Scenario: Delivery agent has submitted account request**

Given the delivery agent has submitted an account request with an email address

And password

And address

And phone number

And name

When the admin has received the request

Then admin can approve the delivery agents account creation.

3.2.3.4 Functional requirement 3.4

**ID: FR22**

**Feature: Manage issues**

**Scenario: A user has submitted an issue.**

Given the user has submitted an issue through the correct form

When the admin has the correct response to the issue

And the admin selected the form of response via letter

Or email

Or phone call

Then the admin can indicate which form and the date of the response.

3.2.3.5 Functional requirement 3.5

**ID: FR23**

**Feature: Verify user photo identification**

**Scenario: A user has submitted an submitted a photo ID.**

Given the user has submitted a photo ID

And the admin has scanned the photo ID

When the admin has verified the photo ID

Then the admin can approve the user account

# 3.3 Non Functional requirements

3.3.1.1 Non Functional requirement

**ID: QR1**

TITLE: Currency exchange commission

GIST: With every transaction a commission fee is charged to the account

SCALE: Reasonable market value, normally around 2.5-5%

3.3.1.2 Non Functional requirement

**ID: QR2**

TITLE: Log in Time

GIST: The fastness of the logging in

SCALE: The amount of time it takes to log in

METER: Measurements obtained from 1000 log in attempts during testing.

MUST: No more than 5 seconds 100% of the time.

WISH: No more than 2 second 100% of the time.

3.3.1.3 Non Functional requirement

**ID: QR3**

TITLE: System Dependability

GIST: The system’s ability to no lose connection to the server.

SCALE: If the system loses the connection to the Internet or the system gets some strange input, the user should be informed and the application close.

METER: Measurements obtained from 100 hours of usage during testing. MUST: 100% of the time.

3.3.1.4 Non Functional requirement

**ID: QR4**

TITLE: Hard Drive Space

GIST: Amount of Hard drive space required to store data kept by the app.

SCALE: The application’s need of hard drive space. And application needs to be able to store and keep record of transactions

3.3.1.5 Non Functional requirement

**ID: QR5**

TITLE: Application Memory Usage

GIST: The amount of strain placed on the OS and amount of memory occupied by the application.

SCALE: MB.

PLAN: Relatively small below 50MB

OS: DEFINED: The mobile Operate System which the application is running on. MB: DEFINED: Megabyte.

3.3.1.6 Non Functional requirement

**ID: QR6**

TITLE: Number of Currencies

GIST: The number of purchasable currencies on the application.

SCALE: The reliability that the application the user wishes to purchase.

MUST: More than 80% of the worldwide currencies available for purchase.

PLAN: More than 90% of the currencies. WISH: 99% of the currencies.

3.3.1.7 Non Functional requirement

**ID: QR7**

TITLE: Application Availability

GIST: The availability of the system be it in web-browser, and App Stores.

SCALE: The average application availability.

MUST: More than 80% of the App Stores & Web-Browsers.

PLAN: More than 90% of the App Store market. WISH: 100% of the app store market. Defined: App Store- place to download application (Google Store, Apple App Store, etc)

3.3.1.8 Non Functional requirement

**ID: QR8**

TITLE: Internet Connection

DESC: The application should be connected to the Internet.

RAT: In order for the application to communicate with the database. DEP:

3.3.1.9 Non Functional requirement

**ID: QR9**

TITLE: Login Account Security

GIST: Security of accounts.

SCALE: If a user tries to log in to the web portal with a non-existing account then the user should not be logged in. The user should be notified about log-in failure.

METER: 1000 attempts to log-in with a non-existing user account during testing. MUST: 100% of the time.

3.3.1.10 Non Functional requirement

**ID: QR10**

TITLE Admin Login Account Security

GIST: Security of accounts.

SCALE: If an admin tries to log in to the web portal with a non-existing account then the admin should not be logged in. The admin should be notified about log-in failure.

METER: 1000 attempts to log-in with a non-existing user account during testing. MUST: 100% of the time.

3.3.1.11 Non Functional requirement

**ID: QR11**

TITLE: Admin Account Security

GIST: Security of admin accounts.

SCALE: An admin and IP address should not be able to log-in to the web portal for a certain time period after three times of failed log-in attempts.

METER: 1000 attempts to log-in during the lock period after user account has been locked because of failed log-in attempts of three times.

MUST: The locking period should be half an hour, and during that period the log-in function is disabled.

3.3.1.12 Non Functional requirement

**ID: QR12**

TITLE: User Create Account Security

GIST: The security of creating account for users of the system.

SCALE: If a user wants to create an account and the desired user name is occupied, the user should be asked to choose a different user name.

METER: Measurements obtained on 1000 hours of usage during testing. MUST: 100% of the time.

3.3.1.13 Non Functional requirement

**ID: QR13**

TITLE: Application Extendibility

DESC: The application should be easy to extend. The code should be written in a way that it favors implementation of new currencies and should be able to calculate the returns and such of an always shifting market place.

RAT: In order for future functions to be implemented easily to the application. DEP: none

3.3.1.14 Non Functional requirement

**ID: QR14**

TITLE: Application testability

DESC: Test environments should be built for the application to allow testing of the applications different functions.

RAT: In order to test the application.

DEP: none

### 4. Appendix IV: Release Plan

We have decided to divide the requirements into two releases. The first being based on the importance/vitality that the requirements have in causing our application perform its basic goals. The second release being focused on integrating the functions that improve the user experience or make the application functionality better. Each release is designed to perform as a fully functional application. Below we have placed each requirement functional and non-functional into a table with a description and the motivation as to why it is included in its specific release. The reason for two releases is that this application is a very specific product with the singular purpose of currency exchange and does not require extensive releases that are carried out over months.

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| **RE:** | **Dependencies** | **Description** | **Motivation** | **Release** |
| FR1 | - | Customer Account Registration | In order for the user to be able to participate on the website, they have to create an account, therefore it is an important requirement for the first release. | 1 |
| FR2 | FR1 | Customer log-in | In order for the user to be able to use the site, they have to be able to login, so this requirement needs be included in the first release. | 1 |
| FR3 | FR2 | Search | The search function is necessary in order to use the site for its purpose, therefore shall be included in the first release. | 1 |
| FR4 | FR2, FR3 | Search results in a list view | The user must be able to see the search results in order to perform an action. This requirement is an integral component of the site and shall be included in the first release. | 1 |
| FR5 | FR 2, FR3, FR4 | Currency selection: Amount of currency, denomination mix, and delivery option | All three of these options are a vital requirement in order for the basic goal of the application to be met, therefore it shall be included in the first release. | 1 |
| FR6 | FR1 | Account management | This is not a vital component of the application, but enhances the user experience, therefore will be included in the second release. | 2 |
| FR7 | FR4, FR5 | Add to cart | This is a vital function of the application. The user must be able to carry out a transaction with this option, therefore it must be included in the first release. | 1 |
| FR8 | FR1 | Retrieve password | This is an important part of the program, due to the customer needing to be able retrieve password at any point for future login, but we have decided to include this in the second release, as it is not vital. | 2 |
| FR9 | FR3 | Search no match found | This requirement makes the application more usable/stable for the user, but is not a necessity, so it shall be included in the second release. | 2 |
| FR10 | FR7 | Go to cart | This requirement is an integral part of transaction process and shall be included in the first release. | 1 |
| FR11 | FR10 | Checkout | This requirement is also an integral part of the transaction process and is necessary to meet basic goal, therefore being necessary in the first release. | 1 |
| FR12 | FR11 | View Transactions | This requirement makes the process better for the user, but is not a necessity in the basic functions of the Application, so it shall be included in the second release. | 2 |
| FR13 | FR11, FR12 | Edit transactions | This requirement is vital in the transaction process of this site (as well as generic transactions in general), and shall be included in the first release due to the necessity of the customer having the ability to cancel a transaction in acceptable timeframe. | 1 |
| FR14 | FR11, FR12 | Submit Issues | Although this is an import aspect of the application that should be provided for the user, it is not vital for the application to function, therefore it shall be included in the second release. | 2 |
| FR16 | - | Delivery agent account request | This is important in order for the agent to be able to fulfill basic functions of site, so it shall be included in the first release. | 1 |
| FR17 | FR16 | Delivery agent login | This has the same implications as the above requirement, so it shall be included in the first release. | 1 |
| FR15 | FR1, FR6 | Submit Validation Photo | This requirement is necessary to create an account, therefore, it shall be in the first release. | 1 |
| FR18 | - | Certify delivery | This is an essential function of the site in order to be able to complete transaction, so it will be included in first release. | 1 |
| FR19 | FR20 | Initialize Top admin account | This account is essential in order for someone to oversee the application and will be included in the first release. | 1 |
| FR20 | - | Create admin account | This is necessary in order to have a functioning site; therefore, it shall be included in the first release. | 1 |
| FR21 | FR16 | Verify delivery agent account | This is an essential requirement for the delivery agent to do his/her job, and for the system in general, so it will be part of the first release. | 1 |
| FR22 | - | Manage issues | This helps users of the site, but is not a necessary component for function in the first release. | 2 |
| FR23 | FR1 | Verify user photo identification | Verifying the user photo is a necessary step in the account creation process, and shall be in the first release. | 1 |
| QR1 | FR11 | Currency exchange commission | This is necessary in generating revenue and shall be included in the first release. | 1 |
| QR2 | - | Log-in time | This will be monitored after the login requirement is implemented but will also be monitored throughout the entire system expansion. | 1 |
| QR3 | - | System dependability | This requirement will be monitored through the entire development process, but cannot be complete until the entirety of the functions is implemented. | 2 |
| QR4 | - | Hard drive space | This requirement will be looked at throughout whole process, but cannot be fully reviewed/improved until all functions are implemented. | 2 |
| QR5 | - | Application memory usage | This requirement will be looked at throughout whole process, but cannot be fully reviewed/improved until all functions are implemented. | 2 |
| QR6 | - | Number of currencies | This is an important requirement that will be tracked throughout the entire process, but will be initially implemented in the first release. | 1 |
| QR7 | - | Application Availability | Users/customers need to be able to access the application from some external place whether that be web or mobile app, so this shall be implemented in the first release after all of the other requirements. | 1 |
| QR8 | - | Internet Connection | This is a mandatory requirement for the application to be able to work throughout its entire process/use, so this will be included in the first release. | 1 |
| QR9 | FR1, FR2 | Login Account Security | This is a basic necessity in order to keep customer account secure and shall be included within first release. | 1 |
| QR10 | - | Admin Login Account Security | This is a basic necessity to keep site secure and prevent other people from accessing the admin’s account. This shall be included in the first release. | 1 |
| QR11 | QR10 | Admin Account Security | This is vital in preventing illegitimate attempts to use the administrator account which is a necessity in providing security for the entire application, so it shall be included in the first release. | 1 |
| QR12 | FR1 | User Create Account Security | This requirement prevents conflict between users with the same name and shall be included in the first release. | 1 |
| QR13 | - | Application Extendibility | This requirement will be looked at and continuously improved upon during the entirety of the development process. | 1 |
| QR14 | - | Application Testability | The testing environment will be continuously extended as the system expands during development | 1 |

The first release will take approximately 25 days to complete and will include the following most important functional/non-functional requirements: FR1, FR2, FR3, FR4, FR5, FR7, FR 10, FR11, FR13, FR15, FR16, FR17, FR18, FR19, FR20, FR21, FR23, QR2, QR6, QR7, QR8, QR9, QR10, QR11, QR12, QR13, QR14.The second release will take approximately another 15 days and will include the following important, but not necessarily vital functions: FR6, FR8, FR9, FR12, FR14, FR 22, QR1, QR3, QR4, QR5. The project in its entirety will take 40 days (to the end of the second release).