**Software Requirements Specifications**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Project Name** | **Version** | **Author** | **Date** | **Comment** | **Peer review** | **Date** | **Comment** |
|
| **Internet Banking System** | **1.1** | **Alaa Gamal** | **1-May-19** | **Adding Functional Requirements** | **Ahmed Hamdy** | **3-May-19** | **Update SRS based on the updates on SIQ sheet** |
| **Internet Banking System** | **1.2** | **Alaa Gamal** | **3-May-19** | **Update the SRS sheet based on SRS peer review** | **Ahmed Hamdy** | **3-May-19** | **No comment** |
| **Internet Banking System** | **1.3** | **Khadija mostafa** | **9-May-19** | **Update the SRS after customer additional requirements regarding to design.** |  |  |  |
| **Internet Banking System** | **1.4** | **Khadija mostafa** | **14-May-19** | **Update SRS after**  **Modifying CR and SIQ ids** |  |  |  |

Contents

[**1.** **Introduction** 3](#_Toc7696637)

[1.1. Purpose 3](#_Toc7696638)

[1.2. Scope of Project 3](#_Toc7696639)

[**2.** **Description of Overall System** 3](#_Toc7696640)

[2.1. Functional Requirements Specifications 3](#_Toc7696641)

[**2.1.1.** **Registration** 3](#_Toc7696642)

[**2.1.2.** **Login Form** 5](#_Toc7696643)

[**2.1.3.** **Access the account/s** 6](#_Toc7696644)

[**2.1.4.** **Transaction** 8](#_Toc7696646)

[**2.1.5.** **Types of User:** 9](#_Toc7696647)

[2.2. Nonfunctional Requirements Specifications 10](#_Toc7696648)

[**2.2.1.** **Performance** 10](#_Toc7696649)

[**2.2.2.** **Security.** 10](#_Toc7696650)

[**2.2.3.** **Usability.** 10](#_Toc7696651)

# **Introduction**

## 1.1. Purpose

The purpose of this document is to present a detailed description of the Internet Banking System. 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 unexpected event. This document is intended for the stakeholders, architects, developers and testers of the system and will be proposed to the Regional Historical Society for its approval.

## 1.2. Scope of Project

This software system will be an Internet Banking. This system will be designed to allow the client deal easily with his/her banking accounts through internet.

More specifically, this system is designed to allow a client to manage and use his/her account/s

As display his/her previous transactions, make transactions between his/her inter accounts or for external accounts .The system also contains a relational database containing a list of clients with their transactions.

# **Description of Overall System**

## Functional Requirements Specifications

### **Registration**

Form contains two web pages , first page will contain username, password, confirm password, user ID fields and mobile phone number to authorized the client by sending message to him including verification code .

And also contain radio button to determine the type of user normal client or admin.

Second page will be verification page.

**Table1: Atomic requirements of registration.**

|  |  |  |  |
| --- | --- | --- | --- |
| **SRS ID** | **Requirement** | **CR ID** | **SIQ\_ID** |
| BANK\_SYS\_SRS\_Reg\_R001 | Registration form must contain username field | Bank\_Sys\_CR\_001 | BANK\_SYS\_SIQ\_Q29  BANK\_SYS\_SIQ\_Q08 |
| BANK\_SYS\_SRS\_Reg\_R002 | Registration form must contain password field | Bank\_Sys\_CR\_001 | BANK\_SYS\_SIQ\_Q29  BANK\_SYS\_SIQ\_Q08 |
| BANK\_SYS\_SRS\_Reg\_R003 | Registration form must contain confirmation password field | Bank\_Sys\_CR\_001 | BANK\_SYS\_SIQ\_Q29  BANK\_SYS\_SIQ\_Q08 |
| BANK\_SYS\_SRS\_Reg\_R004 | Registration form must contain mobile phone field. | Bank\_Sys\_CR\_001 | BANK\_SYS\_SIQ\_Q29  BANK\_SYS\_SIQ\_Q08 |
| BANK\_SYS\_SRS\_Reg\_R005 | Registration form must contain Email field. | Bank\_Sys\_CR\_001 | BANK\_SYS\_SIQ\_Q29  BANK\_SYS\_SIQ\_Q08 |
| BANK\_SYS\_SRS\_Reg\_R006 | Registration form must Register Button. | Bank\_Sys\_CR\_001 | BANK\_SYS\_SIQ\_Q29  BANK\_SYS\_SIQ\_Q08 |
| BANK\_SYS\_SRS\_Reg\_R007 | Username field must accept only characters only or characters and numbers with max length 32. | Bank\_Sys\_CR\_001 | BANK\_SYS\_SIQ\_Q15 |
| BANK\_SYS\_SRS\_Reg\_R008 | Password shall be a strong password contains numbers, characters (capital and small) and special characters. | Bank\_Sys\_CR\_001 | BANK\_SYS\_SIQ\_Q15 |
| BANK\_SYS\_SRS\_Reg\_R009 | Password field shall accept length from 8:12. | Bank\_Sys\_CR\_001 | BANK\_SYS\_SIQ\_Q15 |
| BANK\_SYS\_SRS\_Reg\_R010 | confirmation password must contain same data that in password field | Bank\_Sys\_CR\_001 | BANK\_SYS\_SIQ\_Q8 |
| BANK\_SYS\_SRS\_Reg\_R011 | User national ID Field must not exceed 14 digit. It must accept only digits. | Bank\_Sys\_CR\_001 | BANK\_SYS\_SIQ\_Q15 |
| BANK\_SYS\_SRS\_Reg\_R012 | User national ID Field must accept only digits. | Bank\_Sys\_CR\_001 | BANK\_SYS\_SIQ\_Q15 |
| BANK\_SYS\_SRS\_Reg\_R013 | Mobile phone field must accept only digits | Bank\_Sys\_CR\_001 | BANK\_SYS\_SIQ\_Q15 |
| BANK\_SYS\_SRS\_Reg\_R014 | Email field must accept only valid email | Bank\_Sys\_CR\_001 | BANK\_SYS\_SIQ\_Q15 |
| BANK\_SYS\_SRS\_Reg\_R015 | After the user/admin click on Register button, the user will be redirect to the verification page. | Bank\_Sys\_CR\_001 | BANK\_SYS\_SIQ\_Q15 |
| BANK\_SYS\_SRS\_Reg\_R016 | Verification page must contain text field with title verification code has 3 cells. | Bank\_Sys\_CR\_001 | BANK\_SYS\_SIQ\_Q17 |
| BANK\_SYS\_SRS\_Reg\_R017 | Each cell of verification code shall accept 2 numbers only | Bank\_Sys\_CR\_001 | BANK\_SYS\_SIQ\_Q17 |
| BANK\_SYS\_SRS\_Reg\_R018 | Verification page must contain button with title “confirm” | Bank\_Sys\_CR\_001 | BANK\_SYS\_SIQ\_Q17 |
| BANK\_SYS\_SRS\_Reg\_R019 | After clicking on confirmation button and with valid data the user/admin will be redirect to home page | Bank\_Sys\_CR\_001 | BANK\_SYS\_SIQ\_Q39 |
| BANK\_SYS\_SRS\_Reg\_R020 | In case of Admin: will be input field of staff ID. | Bank\_Sys\_CR\_001 | BANK\_SYS\_SIQ\_Q29   BANK\_SYS\_SIQ\_Q30 |
| BANK\_SYS\_SRS\_Reg\_R021 | Maximum number that can mobile phone field accepts it shall be 20 digits. | Bank\_Sys\_CR\_001 | BANK\_SYS\_SIQ\_Q27 |
| BANK\_SYS\_SRS\_Reg\_R022 | Constrains of staff ID field must not exceed 6 digits. | Bank\_Sys\_CR\_001 | BANK\_SYS\_SIQ\_Q33 |
| BANK\_SYS\_SRS\_Reg\_R023 | minimum number of characters in the username text field is 3 characters | Bank\_Sys\_CR\_001 | BANK\_SYS\_SIQ\_Q25 |
| BANK\_SYS\_SRS\_Reg\_R024 | The format of any error message related to every field in the web app is " invalid format of data " in case customer doesn’t use character constraints. | BANK\_SYS\_CR\_001 | BANK\_SYS\_SIQ\_Q60 |
| BANK\_SYS\_SRS\_Reg\_R025 | Customer shall be redirected to his main page after successful verification code entered | BANK\_SYS\_CR\_001 | BANK\_SYS\_SIQ\_Q39 |
| BANK\_SYS\_SRS\_Reg\_R026 | Error Message shall be displayed "You have entered an invalid format of data, Please try again" if Customer enter non valid verification code with ok button and close icon. | BANK\_SYS\_CR\_001 | BANK\_SYS\_SIQ\_Q40& BANK\_SYS\_SIQ\_Q47 |
| BANK\_SYS\_SRS\_Reg\_R027 | Registration form must contain login in the form of hyper link. | BANK\_SYS\_CR\_001 | BANK\_SYS\_SIQ\_Q49 |
| BANK\_SYS\_SRS\_Reg\_R028 | If customer click on the login hyper link, customer shall be redirected to login page. | BANK\_SYS\_CR\_001 | BANK\_SYS\_SIQ\_Q56 |
| BANK\_SYS\_SRS\_Reg\_R029 | If customer press on ok button in any pop up message customer shall remain in the same page. | BANK\_SYS\_CR\_001 | BANK\_SYS\_SIQ\_Q56 |
| BANK\_SYS\_SRS\_Reg\_R030 | If customer press on close icon in any pop up message customer shall remain in the same page. | BANK\_SYS\_CR\_001 | BANK\_SYS\_SIQ\_Q57 |
| BANK\_SYS\_SRS\_Reg\_R031 | The format of any error message related to every field in the web app is " invalid format of data " in case customer leave any leave any mandatory field empty. | BANK\_SYS\_CR\_001 | BANK\_SYS\_SIQ\_Q58 |
| BANK\_SYS\_SRS\_Reg\_R032 | The format of any error message related to every field in the web app is " invalid format of data " in case customer doesn’t achieve length constraints. | BANK\_SYS\_CR\_001 | BANK\_SYS\_SIQ\_Q59 |

### **Login Form**

Form contains username, password and user ID fields and Login button.

|  |  |  |  |
| --- | --- | --- | --- |
| **SRS ID** | **Requirement** | **CR ID** | **SIQ\_ID** |
| BANK\_SYS\_SRS\_Log\_R001 | Login form must contain username field | Bank\_Sys\_CR\_002 | BANK\_SYS\_SIQ\_Q9 |
| BANK\_SYS\_SRS\_Log\_R002 | Login form must contain password field | Bank\_Sys\_CR\_002 | BANK\_SYS\_SIQ\_Q9 |
| BANK\_SYS\_SRS\_Log\_R003 | Login form must contain national ID field | Bank\_Sys\_CR\_002 | BANK\_SYS\_SIQ\_Q9 |
| BANK\_SYS\_SRS\_Log\_R004 | Login form must contain Login button | Bank\_Sys\_CR\_002 | BANK\_SYS\_SIQ\_Q9 |
| BANK\_SYS\_SRS\_Log\_R005 | username field accept only characters  and numbers | Bank\_Sys\_CR\_002 | BANK\_SYS\_SIQ\_Q16 |
| BANK\_SYS\_SRS\_Log\_R006 | User name field must not exceeds max length of 32. | Bank\_Sys\_CR\_002 | BANK\_SYS\_SIQ\_Q16 |
| BANK\_SYS\_SRS\_Log\_R007 | National ID field accepts only numbers. | Bank\_Sys\_CR\_002 | BANK\_SYS\_SIQ\_Q16 |
| BANK\_SYS\_SRS\_Log\_R008 | Password field shall accept any input to make secure login | Bank\_Sys\_CR\_002 | BANK\_SYS\_SIQ\_Q17 |
| BANK\_SYS\_SRS\_Log\_R009 | In case of the user enter password wrong more than 3 times, the account to be unavailable for login for the next 24 hours and no need to visit the bank branch to restore the account, yet the user should be notified on his mobile by an SMS that he won't be able to further login on his account for the next 24. | Bank\_Sys\_CR\_002 | BANK\_SYS\_SIQ\_Q36 |
| BANK\_SYS\_SRS\_Log\_R010 | The format of any error message related to every field in the web app is " invalid format of data " below the field colored with red in case customer doesn’t use character constraints. | BANK\_SYS\_CR\_002 | BANK\_SYS\_SIQ\_Q60 |
| BANK\_SYS\_SRS\_Log\_R011 | Login form must contain register in the form of hyper link. | BANK\_SYS\_CR\_002 | BANK\_SYS\_SIQ\_Q48 |
| BANK\_SYS\_SRS\_Log\_R012 | The format of any error message related to every field in the web app is " this field is mandatory " below the empty field colored with red in case customer leave any mandatory field empty. | BANK\_SYS\_CR\_002 | BANK\_SYS\_SIQ\_Q58 |
| BANK\_SYS\_SRS\_Log\_R013 | The format of any error message related to every field in the web app is " the length must be between .. and .." below the field colored with red in case customer doesn’t achieve length constraints. | BANK\_SYS\_CR\_002 | BANK\_SYS\_SIQ\_Q59 |

### **Access the account/s**

The client should have a direct access to his/her different accounts where he can view a history of previous transactions.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **SRS\_ID** | **Requirement** | **CR\_ID** | **SIQ\_ID** |  |
| BANK\_SYS\_SRS\_PT\_R001 | Main page shall contain all customer accounts (currents and saving accounts). | BANK\_SYS\_CR\_003 | BANK\_SYS\_SIQ\_Q18 |  |
| BANK\_SYS\_SRS\_PT\_R002 | Customer shall be able to have any numbers of accounts (savings and current). | BANK\_SYS\_CR\_003 | BANK\_SYS\_SIQ\_Q3 |  |
| BANK\_SYS\_SRS\_PT\_R003 | Customer shall be able to click on any account show details button to be redirected to the account page. | BANK\_SYS\_CR\_009 | BANK\_SYS\_SIQ\_Q19 |  |
| BANK\_SYS\_SRS\_PT\_R004 | account page shall display the Customer balance & account type | BANK\_SYS\_CR\_003 | BANK\_SYS\_SIQ\_Q19 |  |
| BANK\_SYS\_SRS\_PT\_R005 | Account page shall have a hyperlink with title transfer. | BANK\_SYS\_CR\_003 | BANK\_SYS\_SIQ\_Q19 |  |
| BANK\_SYS\_SRS\_PT\_R006 | Account page shall have a hyperlink with title previous transactions. | BANK\_SYS\_CR\_003 | BANK\_SYS\_SIQ\_Q19 |  |
| BANK\_SYS\_SRS\_PT\_R007 | If Customer clicks on transfer page, Customer shall be redirected to transfer page. | BANK\_SYS\_CR\_003 | BANK\_SYS\_SIQ\_Q19 |  |
| BANK\_SYS\_SRS\_PT\_R008 | If Customer clicks on previous transactions page, Customer shall be redirected to previous transactions page. | BANK\_SYS\_CR\_003 | BANK\_SYS\_SIQ\_Q19 |  |
| BANK\_SYS\_SRS\_PT\_R009 | Previous transactions page shall have drop box with three options (week, month and year) with a default value of month. | BANK\_SYS\_CR\_003 | BANK\_SYS\_SIQ\_Q21 BANK\_SYS\_SIQ\_Q28 |  |
| BANK\_SYS\_SRS\_PT\_R010 | Previous transactions page shall have button with title “view”. | BANK\_SYS\_CR\_003 | BANK\_SYS\_SIQ\_Q21 |  |
| BANK\_SYS\_SRS\_PT\_R011 | If Customer chooses week from the drop box in the previous transactions page, a second cascaded drop box shall be displayed with 4 options (1, 2, 3, 4) with default value 1. | BANK\_SYS\_CR\_003 | BANK\_SYS\_SIQ\_Q22 |  |
| BANK\_SYS\_SRS\_PT\_R012 | If Customer chooses month from the drop box in the previous transactions page, a second cascaded drop box shall be displayed with 12 options from 1to 12 with default value 1. | BANK\_SYS\_CR\_003 | BANK\_SYS\_SIQ\_Q22 |  |
| BANK\_SYS\_SRS\_PT\_R013 | if Customer chooses year from the drop box in the previous transactions page , a second cascaded drop box shall be displayed with 5 options from 1to 5 with default value 1. | BANK\_SYS\_CR\_003 | BANK\_SYS\_SIQ\_Q22 |  |
| BANK\_SYS\_SRS\_PT\_R014 | If Customer clicks on view button, Customer shall be redirected to a page with his previous transactions according to what he chose from the drop box by maximum 5 years. | BANK\_SYS\_CR\_003 | BANK\_SYS\_SIQ\_Q22 BANK\_SYS\_SIQ\_Q5 |  |
| BANK\_SYS\_SRS\_PT\_R015 | if Customer clicks on view button and he doesn't have transactions in this period , Customer shall be redirected to  a page with message of " no valid transactions in this period " with close icon and button with title ok . | BANK\_SYS\_CR\_003 | BANK\_SYS\_SIQ\_Q22  &  BABK\_SYS\_SIQ\_Q47 |  |
| BANK\_SYS\_SRS\_PT\_R016 | the listing transactions page shall have listed items  with three radio buttons (10, 20, 30) | BANK\_SYS\_CR\_003 | BANK\_SYS\_SIQ\_Q22 |  |
| BANK\_SYS\_SRS\_PT\_R017 | Customer shall be able to select one radio button to identify the numbers of previous transactions displayed per page. | BANK\_SYS\_CR\_003 | BANK\_SYS\_SIQ\_Q22 |  |
| BANK\_SYS\_SRS\_PT\_R018 | The listing transactions page shall have next button in the shape of next arrow at the end of the listing page. Which will be un clickable at the last (10, 20 or 30). | BANK\_SYS\_CR\_003 | BANK\_SYS\_SIQ\_Q28 |  |
| BANK\_SYS\_SRS\_PT\_R019 | The listing transactions page shall have back button in the shape of back arrow at the end of the listing page. Which will be un clickable at the first (10, 20 or 30). | BANK\_SYS\_CR\_003 | BANK\_SYS\_SIQ\_Q28 |  |
| BANK\_SYS\_SRS\_PT\_R020 | each previous transaction shall display the ID of the Customer who he has transferred the money to or receive the money from | BANK\_SYS\_CR\_003 | BANK\_SYS\_SIQ\_Q6 |  |
| BANK\_SYS\_SRS\_PT\_R021 | Each previous transactions shall display the amount in red in case Customer transferred to. | BANK\_SYS\_CR\_003 | BANK\_SYS\_SIQ\_Q6 |  |
| BANK\_SYS\_SRS\_PT\_R022 | Each previous transactions shall display the amount in green in case Customer receive from. | BANK\_SYS\_CR\_003 | BANK\_SYS\_SIQ\_Q6 |  |
| BANK\_SYS\_SRS\_PT\_R023 | Customer can have “Saving account” type | BANK\_SYS\_CR\_003 | BANK\_SYS\_SIQ\_Q2 |  |
| BANK\_SYS\_SRS\_PT\_R024 | Customer can have “current account” type | BANK\_SYS\_CR\_003 | BANK\_SYS\_SIQ\_Q2 |  |
| BANK\_SYS\_SRS\_PT\_R025 | The default value of the drop box with title “bank” in the transfer page | BANK\_SYS\_CR\_003 | BANK\_SYS\_SIQ\_Q41 |  |
| BANK\_SYS\_SRS\_PT\_R026 | Customer main page shall have button with title show details. | BANK\_SYS\_CR\_003 | BANK\_SYS\_SIQ\_Q50 |  |
| BANK\_SYS\_SRS\_PT\_R027 | Customer main page shall have button with title show previous transactions. | BANK\_SYS\_CR\_003 | BANK\_SYS\_SIQ\_Q50 |  |
| BANK\_SYS\_SRS\_PT\_R028 | Customer account page shall have button with title accounts. | BANK\_SYS\_CR\_003 | BANK\_SYS\_SIQ\_Q46 |  |
|  |  |  |  |  |
| BANK\_SYS\_SRS\_PT\_R029 | Customer shall be redirected to main page if he clicks on accounts button in account page. | BANK\_SYS\_CR\_003 | BANK\_SYS\_SIQ\_Q46 |  |
| BANK\_SYS\_SRS\_PT\_R030 | Previous transactions page shall have button with title accounts. | BANK\_SYS\_CR\_003 | BANK\_SYS\_SIQ\_Q46 |  |
| BANK\_SYS\_SRS\_PT\_R031 | Listing page shall have button with title accounts. | BANK\_SYS\_CR\_003 | BANK\_SYS\_SIQ\_Q46 |  |
| BANK\_SYS\_SRS\_PT\_R032 | Customer shall be redirected to main page if he clicks on accounts button in previous transactions page. | BANK\_SYS\_CR\_003 | BANK\_SYS\_SIQ\_Q46 |  |
| BANK\_SYS\_SRS\_PT\_R033 | Customer shall be redirected to main page if he clicks on accounts button in listing page. | BANK\_SYS\_CR\_003 | BANK\_SYS\_SIQ\_Q46 |  |
| BANK\_SYS\_SRS\_PT\_R034 | Customer shall be able to click on any account show previous transactions button to be redirected to the previous transactions page. | BANK\_SYS\_CR\_003 | BANK\_SYS\_SIQ\_Q50 |  |
| BANK\_SYS\_SRS\_PT\_R035 | Customer shall be redirected to login page with empty fields if customer press on logout hyperlink from his (accounts/ account/previous transaction/ listing) page. | BANK\_SYS\_CR\_003 | BANK\_SYS\_SIQ\_Q51 |  |
| BANK\_SYS\_SRS\_PT\_R036 | If customer press back from his account page, customer shall be redirected to his main/accounts page. | BANK\_SYS\_CR\_003 | BANK\_SYS\_SIQ\_Q52 |  |
| BANK\_SYS\_SRS\_PT\_R037 | If customer press back from his listing page, customer shall be redirected to his previous transaction page. | BANK\_SYS\_CR\_003 | BANK\_SYS\_SIQ\_Q53 |  |
| BANK\_SYS\_SRS\_PT\_R038 | If customer press back from his previous transaction page, customer shall be redirected to his account page. | BANK\_SYS\_CR\_003 | BANK\_SYS\_SIQ\_Q54 |  |
| BANK\_SYS\_SRS\_PT\_R039 | The listing page shall have scroll bar. | BANK\_SYS\_CR\_003 | BANK\_SYS\_SIQ\_Q55 |  |

### **Transaction**

The client should have the ability to perform transaction either between his/her accounts or between him and external accounts.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **SRS\_ID** | **Requirement** | **CR\_ID** | **SIQ\_ID** |  |
| BANK\_SYS\_SRS\_TR\_R001 | Transfer page shall contain text field with title amount. | BANK\_SYS\_CR\_004 | BANK\_SYS\_SIQ\_Q20 |  |
| BANK\_SYS\_SRS\_TR\_R002 | Text field “amount " shall only accept numbers. | BANK\_SYS\_CR\_004 | BANK\_SYS\_SIQ\_Q20 |  |
| BANK\_SYS\_SRS\_TR\_R003 | Transfer page shall contain text field with title account ID. | BANK\_SYS\_CR\_004 | BANK\_SYS\_SIQ\_Q20 |  |
| BANK\_SYS\_SRS\_TR\_R004 | Text field “account ID " shall only accept numbers. | BANK\_SYS\_CR\_004 | BANK\_SYS\_SIQ\_Q20 |  |
| BANK\_SYS\_SRS\_TR\_R005 | Transfer page shall contain drop box with title bank name contains “CIB ”name with our bank as default value. | BANK\_SYS\_CR\_004 | BANK\_SYS\_SIQ\_Q20 |  |
| BANK\_SYS\_SRS\_TR\_R006 | transfer page shall contain button with title submit | BANK\_SYS\_CR\_004 | BANK\_SYS\_SIQ\_Q20 |  |
| BANK\_SYS\_SRS\_TR\_R007 | if Customer entered invalid account ID , error Message  "You have entered an invalid account , Please try again" with close icon and button with title ok . | BANK\_SYS\_CR\_004 | BANK\_SYS\_SIQ\_Q44  &BANK\_SYS\_SIQ\_Q47 |  |
| BANK\_SYS\_SRS\_TR\_R008 | if Customer entered amount of money greater than his balance , error Message shall be displayed "you don't have the required amount , please check your balance" with close icon and button with title ok . | BANK\_SYS\_CR\_004 | BANK\_SYS\_SIQ\_Q43  &BANK\_SYS\_SIQ\_Q47 |  |
| BANK\_SYS\_SRS\_TR\_R009 | Customer can transfer to any account (current or savings) in the same bank or in different bank . | BANK\_SYS\_CR\_004 | BANK\_SYS\_SIQ\_Q4 |  |
| BANK\_SYS\_SRS\_TR\_R010 | The maximum amount of money can Customer transfer to any other current account shall be 10,000 per transaction. | BANK\_SYS\_CR\_004 | BANK\_SYS\_SIQ\_Q12 |  |
| BANK\_SYS\_SRS\_TR\_R011 | The maximum amount of money can Customer transfer to any other saving account shall be 100,000 per transaction. | BANK\_SYS\_CR\_004 | BANK\_SYS\_SIQ\_Q12 |  |
| BANK\_SYS\_SRS\_TR\_R012 | The maximum amount of money can Customer transfer to any specific current account shall be 100,000 per day. | BANK\_SYS\_CR\_004 | BANK\_SYS\_SIQ\_Q14 |  |
| BANK\_SYS\_SRS\_TR\_R013 | The maximum amount of money can Customer transfer to any other saving account shall be 1000,000 per day. | BANK\_SYS\_CR\_004 | BANK\_SYS\_SIQ\_Q14 |  |
| BANK\_SYS\_SRS\_TR\_R014 | Customer shall be able to transfer any amount of money per day unless exceeding the maximum amount of money for each account Customer will transfer to. | BANK\_SYS\_CR\_004 | BANK\_SYS\_SIQ\_Q13 |  |
| BANK\_SYS\_SRS\_TR\_R016 | Customer shall be able transfer money to another account | BANK\_SYS\_CR\_004 | BANK\_SYS\_SIQ\_Q1 |  |
| BANK\_SYS\_SRS\_TR\_R020 | The minimum amount of money Customer can transfer is 50 L.E | BANK\_SYS\_CR\_004 | BANK\_SYS\_SIQ\_Q26 |  |
| BANK\_SYS\_SRS\_TR\_R021 | The default value of the dropbox with title “bank” in the transfer page is “Our bank” | BANK\_SYS\_CR\_004 | BANK\_SYS\_SIQ\_Q41 |  |
| BANK\_SYS\_SRS\_TR\_R022 | Customer can transfer money to “CIB” bank | BANK\_SYS\_CR\_004 | BANK\_SYS\_SIQ\_Q42 |  |
| BANK\_SYS\_SRS\_TR\_R023 | Customer can transfer money to “HSBC” bank | BANK\_SYS\_CR\_004 | BANK\_SYS\_SIQ\_Q42 |  |
| BANK\_SYS\_SRS\_TR\_R024 | Customer can transfer money to “QNB” bank | BANK\_SYS\_CR\_004 | BANK\_SYS\_SIQ\_Q42 |  |
| BANK\_SYS\_SRS\_TR\_R025 | Customer can transfer money to “AHLI” bank | BANK\_SYS\_CR\_004 | BANK\_SYS\_SIQ\_Q42 |  |
| BANK\_SYS\_SRS\_TR\_R026 | Customer can transfer money to “MISR” bank | BANK\_SYS\_CR\_004 | BANK\_SYS\_SIQ\_Q42 |  |
| BANK\_SYS\_SRS\_TR\_R027 | the error message shall be displayed if Customer entered amount of money to transfer greater than his balance is “You have exceeded the amount of money allowed to be transferred” with close icon and button with title ok . | BANK\_SYS\_CR\_004 | BANK\_SYS\_SIQ\_Q43  &BANK\_SYS\_SIQ\_Q47 |  |
| BANK\_SYS\_SRS\_TR\_R028 | Transfer page shall contain drop box with title bank name contains “HSBC”name with our bank as default value. | BANK\_SYS\_CR\_004 | BANK\_SYS\_SIQ\_Q20 |  |
| BANK\_SYS\_SRS\_TR\_R029 | Transfer page shall contain drop box with title bank name contains “QNB”name with our bank as default value. | BANK\_SYS\_CR\_004 | BANK\_SYS\_SIQ\_Q20 |  |
| BANK\_SYS\_SRS\_TR\_R030 | Transfer page shall contain drop box with title bank name contains “AHLI”name with our bank as default value. | BANK\_SYS\_CR\_004 | BANK\_SYS\_SIQ\_Q20 |  |
| BANK\_SYS\_SRS\_TR\_R031 | Transfer page shall contain drop box with title bank name contains “MISR”name with our bank as default value. | BANK\_SYS\_CR\_004 | BANK\_SYS\_SIQ\_Q20 |  |
| BANK\_SYS\_SRS\_TR\_R032 | Transfer page shall have button with title accounts. | BANK\_SYS\_CR\_004 | BANK\_SYS\_SIQ\_Q46 |  |
| BANK\_SYS\_SRS\_TR\_R033 | Customer shall be redirected to main page if he clicks on accounts button in transfer page. | BANK\_SYS\_CR\_004 | BANK\_SYS\_SIQ\_Q46 |  |
|  |  |  |  |  |
|  |  |  |  |  |

### **Types of User:**

1. Client: Registration, Login, view previous transaction, transaction.
2. Admin: Registration, Login, Add client, Delete client, doing any transaction.

|  |  |  |  |
| --- | --- | --- | --- |
| **SRS ID** | **Requirement** | **CR ID** | **SIQ\_ID** |
| BANK\_SYS\_SRS\_Admin\_R001 | Admin can add user | N/A | BANK\_SYS\_SIQ\_Q10 |
| BANK\_SYS\_SRS\_Admin\_R002 | Admin can do any transaction | N/A | BANK\_SYS\_SIQ\_Q10 |
| BANK\_SYS\_SRS\_Admin\_R003 | Admin can remove user | N/A | BANK\_SYS\_SIQ\_Q10 |
| BANK\_SYS\_SRS\_Admin\_R004 | Main page of admin shall be contain text field with title id (to enter Customer id ) | N/A | BANK\_SYS\_SIQ\_Q31 |
| BANK\_SYS\_SRS\_Admin\_R005 | Main page of admin shall be contain2 buttons (delete - view) | N/A | BANK\_SYS\_SIQ\_Q31 |
| BANK\_SYS\_SRS\_Admin\_R006 | admin can remove user using delete button | N/A | BANK\_SYS\_SIQ\_Q31 |
| BANK\_SYS\_SRS\_Admin\_R007 | Admin can use view button to redirect to customer account page. | N/A | BANK\_SYS\_SIQ\_Q31 |
| BANK\_SYS\_SRS\_Admin\_R008 | Home page of admin shall contain a hyper link: add new account. | N/A | BANK\_SYS\_SIQ\_Q31 |
| BANK\_SYS\_SRS\_Admin\_R009 | in case of a admin click on hyper link : add new account , admin shall be redirected to the normal registration page in which  he can enter all Customer data and no need to send a verification code to the  phone number in this case. | N/A | BANK\_SYS\_SIQ\_Q32 |
|  |  |  |  |

## Nonfunctional Requirements Specifications

From our scope, there are two nonfunctional requirements.

### **Performance**

### **Security.**

### **Usability.**

|  |  |  |  |
| --- | --- | --- | --- |
| **SRS ID** | **Requirement** | **CR ID** | **SIQ\_ID** |
| BANK\_SYS\_SRS\_NF\_R001 | Performance: The avg latency of 90% percent is 7 sec by maximum for each response on a request hits the backend. | N/A | BANK\_SYS\_SIQ\_Q24 |  |
| BANK\_SYS\_SRS\_NF\_R002 | Performance : the load of the system around 2000 TPS (Transaction per second) | N/A | BANK\_SYS\_SIQ\_Q24 |  |
| BANK\_SYS\_SRS\_NF\_R003 | Security: the system must have 2way authentication in registration | N/A | BANK\_SYS\_SIQ\_Q11 |  |
| BANK\_SYS\_SRS\_NF\_R004 | Security: Session time out is 2 minute | N/A | BANK\_SYS\_SIQ\_Q11 |  |
| BANK\_SYS\_SRS\_NF\_R005 | Security: in registration and login , if customer click on back button ,all fields will be clear | N/A | BANK\_SYS\_SIQ\_Q45 |  |
| BANK\_SYS\_SRS\_NF\_R006 | Usability : the color of website will be blue and white | N/A | BANK\_SYS\_SIQ\_Q35 |  |
|  |  |  |  |  |