# Software Requirements Specification

for

# < Bank management system >

**Version 1.1approved** 

Prepared by

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< Commercial Bank >

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### **Revision History**

Name	Date	Reason For Changes	Version
Dr /Mohamed	15/3/2023	We needed to add some functions from different	
Mamdouh		departments	

## 1. Introduction

### 1.1 Purpose

 This document gives detailed functional and nonfunctional requirements for the bank customer services system and the software system for customer service employees provides many options that helps the employee to complete the customer required service as fast and easy as possible.

### 1.2 Product Scope

- The customer service department is considered the most important department of the bank because it performs many operations, and it is one of the departments in which dealings are directly between the customer and the employee.
- This department performs many operations such as opening a personal account, opening an account for a company, purchasing a certificate, making a deposit, making external transfers and internal transfers, *receive* cash checks, or opening a sub account or having educational loan, car loan, personal loan,...........

- This department has dealings with most of the other departments of the bank, such as the Operations Department or the Teller Department.
- o No operation is carried out in this department without the approval of the department Manager.

### 1.3 References

- All information has been collected from two interviews with:
  - AL- AHLI bank (Al Azhar branch) manager
  - AL- AHLI bank (HADAYIEQ HELWAN branch) loan officer

## 2. Overall Description

- o The system is used to Customer service staff in banks to facilitate their work.
- o It is the employee who enters his data, which is his name and password, to unlock the device.
- o His access to the icons is according to the functions he performs, such as
- opening a personal account in this case, he requires entering the customer's data such as the national number, his name, the mobile number and the customer code in the bank or
- open an account for a company in this case, asking for papers from the client or
- opening certificates or deposits, and in this case, he is sure that the customer has an account and then starts choosing the duration of the certificate and its benefits.
- o The employee can also transfer money from one account to another and receive bank cash checks.

### 2.1 Product Function

- Open a personal account.
- Open an account for company.
- Work certificates.
- o Farewell work.

- Transfers from one account to another.
- Receive bank checks.
- allows you to borrow in increments, repay it and borrow again.

### 2.2 User Classes and characteristics

- O The people who use the system are
  - bank employees (especially the employees of the customer service department),
  - the manager of the department.
  - Customer

### 2.3 Operating Environment

### Hardware

Standard PC with at least 1-GHz processor and 1GB of RAM Cable, DSL, or ISDN Internet

### Software

Front end: Gtk+, Gss, php,

Backend: MySQL Platform: windows 10

Webserver: apache2.2

Web browser: Microsoft internet explorer

### 2.4 Assumptions and Dependencies

- Some operations can't be done without an approval from the department managers and in some cases the department manager will need an approve from his manager.
- The bank main aim is to convert all the onsite transactions to an online transactions.
- Among the needs that stop the employee's work is that the system falls and this happens because of:
- The interruption of the Internet.
- Contracting with a company that provides a bad Internet or blackouts.
- The excessive pressure on the system as a result for the excessive number.
  - The withdraw limiting due to the economic conditions causes a problem with the customers.

## 3. System Functions

### > 3.1 Customer service

## **3.1.1** log in

Code	Requirements statement	Must/should	Comments
FR001	user logins by entering name & a password.	must	
	Add an option for changing the password in case the user forgot it. labeled as (forgot my password).	should	

## 3.1.2 Open an account.

Code	Requirements statement	Must/should	Comments
FR001	There be an option for opening a personal	must	
	account.		
	There be an option for opening an account for a company.	must	

## 3.1.3 Withdraw and deposit.

Code	Requirements statement	Must/should	Comments
FR001	There must be a limit to withdraw money (50000).	must	
FR002	To withdraw money from someone's account the customer should have an authorization from the person who distributes the money from his account	must	
FR003	To deposit money in a personal account the customer should provide the source of the income.	Must	

### 3.1.4 Transactions

code	Requirements statement	Must/should	Comments
FR001	There must be an option to do an	must	
	external transaction.		
FR002	There must be an option to an internal	must	
	Transaction.		

### 3.1.5 Create a sub account.

code	Requirements statement	Must/should	Comments
FR001	There must be an option for creating a	must	
	deposit.		
FR002	There must be an option to buy	must	
	certificates and choosing how many		
	years and how much are the benefits.		
FR003	The customer must have a main	must	
	account.		

### 3.1.6 Customer info.

code	Requirements statement	Must/should	Comments
FR001	There must be an option for customer	must	
	info. That provides information for the		
	customer such as his name, mobile		
	number and national id.		

## 3.1.7 user security

code	Requirements statement	Must/should	Comments
FR001	There must be an option for accounts	must	
	security provides a way to change the		
	password and the username of the		
	current account without go to the home		
	page.		

### > 3.2 LOAN MANAGEMENT SYSTEM

## 3.2.1 Get a personal loan.

code	Requirements statement	Must/should	Comments
FR001	There must be an option to enter your own National ID.	must	
FR002	There must be an option to download your Identification card.	Must	

•		

There must be an option to choose the amount of loan you want to borrow	must	
There should be an option to choose the duration of instalment	should	

## 3.2.2 Car Loan:

code	Requirements statement	Must/should	Comments
FR001		must	
	There must be an option to enter your		
	own National ID & Identification card.		
FR002	There must be a limit to the instalment of	must	
	the loan (7 years)		

## 3.2.3 Education loan:

code	Requirements statement	Must/Should	Comments
	There must be an option to enter your national id, identification card and and delivery facilities	must	
	There must be an option to Submit an approved statement of tuition fees to the lending authority, If you are employed, you must submit a salary statement	Must	

## 3.2.4 Mortgage loan:

code	Requirements statement	Must/Should	Comments
FR001	There must be an option to enter your national id, identification card	must	
	There should be an option that allows you to earn a loan that financing up to 80% of the home value or other destinations finance 100% of your home value	should	

## **4 Nonfunctional Requirements**

## 4.1 Data Saving

Code	Requirements statement	Must/should	Comments
NFR001	The system should provide such as	must	
	Auto Saving to avoid losing any data		
	in case of any sudden problems or		
	errors.		

## 4.2 Speed & performance

Code	Requirements statement	Must/ should	Comments
NFR001	Each transaction must be completed in	must	
	the shortest possible time and not more		
	than two seconds.		

## 4.3 Capacity

Code	Requirements statement	Must/ should	Comments
NFR001	The system should work without problems	must	
	with any number of employees who use it		
	and regardless of the number of operations		
	that take place.		

## 4.4 Reliability

Code	Requirements statement	Must/should	Comments
NFR001	The application should be highly reliable, and it should generate all the updated information in correct order.	must	

## 4.5 Security

Comments

## 4.6 Usability

Code	Requirements statement	Must/should	Comments
NFR001	The system should be easy to use and	want	
	not complex so that a user with basics		
	in computer skills will use it perfectly.		

### Interview outline

Interviewee: Interviewer:

Mr/ Hisham

Mr/Mohamed sabry Sohaila Mohamed

Location/Medium: phone call

Phone number : 01228424877 Appointment Date

: 12/3/2023

**Start Time:** 

20:00 PM

End Time:

21:00 PM

Objective:

The objective of the interview is to Learn about bank customer service system, it's problems and their advantages, and information about who uses the system and who to improve it

#### Reminders

The doctor is very experienced in the field and has a lot of information and he liked the idea of the website

Agenda: Approximate Time:

Introduction 1 minute
Background on Project 1 minute

Overview of interview

Proplem with the connection 1 minute

Permission to record 1 minute

Topic 1 Questions 2 minutes

Topic 2 Questions 3 minutes

Topic 3 Questions 2 minutes

Topic 4 Questions 1minute

Topic 5 Questions 1minute

Topic 6 Questions 1minut

Topic 7 Questions 7 minutes

Topic 8 Questions 1minute

Topic 9 Questions 3minutes
Topic 10 Questions 2 minutes

Topic 11 Questions

Topic 12 Questions

Topic 13 Questions

**Topic 14 Questions** 

all departments of the bank by a direct or indirect way

Page 10 **Topic 15 Questions Topic 16 Questions Topic 17 Questions Topic 18 Questions** 7minutes Summary of Major points 3 minutes **Questions from interviewee** 2 minutes Closing 1 minutes General observations: Unresolved Issues: The problem of the system fall and that they want to convert all the transactions to be online Interviewee: Mr/hisham Date: 12 / 3 / 2023 Note: **Questions:** Questions 1: What are the departments of the bank? **Answer:** operations-customer service-teller. Questions2: Q2- What is the most important department in the bank? Answer: customer service. Questions 3: What is the function of each customer service department? **Answer:** main function serve the customer. Questions 4: Can the employee work from home? **Answer:** specific departments not related with branches. Questions5: what are the departments that deals with the customers direct or indirect? Answer:

Question 6:

What Are the operations that a customer can do when entering the bank?

#### **Answer:**

- Open a personal account.
- Open an account for company.
- Work certificates.
- Farewell work.
- Transfers from one account to another.
- Receive bank checks.

**Ouestions** 7

What is the name of the software you are working on?

**Answer:** 

Flex cube on windows version 10

Questions8:

Is there any limits for the customers to withdraw or deposite?

**Answer:Yes** 

Questions9:

How much will the website help you?

Answer:

It will save time and us reduce the pressure on the customer service

Ouestions 10:

10- what are the options in the loan department?

Answer:

**Educational loan** 

**Car loan** 

Personal loan ,..... etc. .

Ouestions 11:

What are the main needs to have a loan?

Answer: own National ID & Identification card.

Question 12:

What are the details of having a loan and the instalment ?

The details of it in the srs document

Questions 13:

who enters customer data?

Answer: sometimes the employee and sometimes the customer himself.

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### Question 14:

Whose approval is needed for the operations ?

Answer: Some operations can't be done without an approval from the department managers and in some cases the department manager will need an approve from his manager.

#### **Questions 15:**

What does stop the employee's work?

#### **Answer:**

the system falls and this happens because of:

- The interruption of the Internet.
- Contracting with a company that provides a bad Internet or blackouts.

### The excessive pressure on the system as a result for the excessive number

Ouestion 16:

What are the details of having a loan and the instalment ?

The details of it in the srs document

#### Questions 17:

What should you have to withdraw money from someone's account?

#### Answer:

To withdraw money from someone's account the customer should have an authorization from the person who distributes the money from his account

### Question 18:

What is the function of auto saving ?

The system should provide such as Auto Saving to avoid losing any data in case of any sudden problems or errors.

### Questions 19:

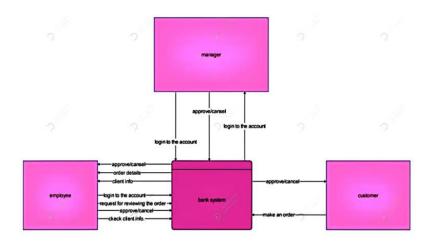
What is the capacity of the system?

The system should work without problems with any number of employees who use it and regardless of the number of operations that take place.

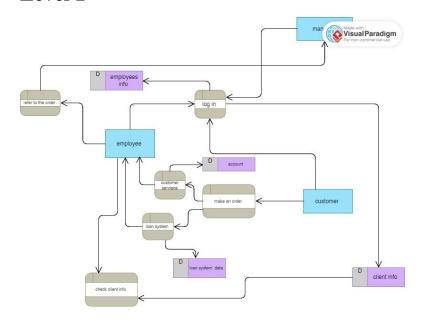
## 5 Diagrams

## **5.1 Data-Flow Diagram (DFD)**

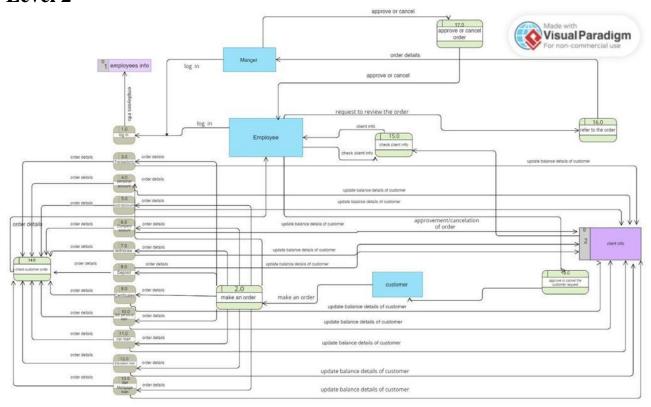
## Level 0



## Level 1



### Level 2



## **5.2 Entity-Relationship Diagram (ERD)**

