Capgemini

# Banking Application

## Software Requirements Specification(SRS) Document

## Sprint Implementation

## Project Timeline: 24.8.2022 to 30.8.2022

## Table of Contents

# Software Requirements Specification

## 1. Introduction

The introduction of the Software Requirements Specification (SRS) provides an overview of the entire SRS with purpose, scope, definitions, acronyms, abbreviations, references and overview of the SRS. The aim of this document is to gather and analyze and give an in-depth insight of the complete **Banking Application** by defining the problem statement in detail. The purpose of this document is that the requirements mentioned in it should be utilized by software developer to implement the system. This application will support banking transaction. The detailed requirements of the **Banking Application** are provided in this document.

### 1.1 Purpose

The banking system is specifically developed for banking application with facilities of account opening, deposit & withdrawal. Secondly, the application also allows only the authorized bank personnel to transfer money from one account in the same bank to another. This system also allows banking personnel to edit and delete customer details as well as generate customer report & transaction report.

In short, the purpose of this SRS document is to provide a detailed overview of our software product, its parameters and goals. This document describes the project's target audience and its user interface, hardware and software requirements. It defines how our client, team and audience see the product and its functionality. Nonetheless, it helps any designer and developer to assist in software delivery lifecycle (SDLC) processes.

### 1.2 Scope

Primarily, the scope of the banking application features to ensure smooth banking operations. The main aim of an application is to somewhere automate records on the system. It gives all sorts of functions which are required by the bank in order to run a stable system. In addition to that it also helps to manually check the records of the pre-existing system like transactions that are made in the past. The application also changes or manipulates the new data that is being added and is then re-recorded. One can also check their present transactions that are in process and keep a check on their accounts via this application. It’s not only useful for the customers but also for the admin.

This SRS is also aimed at specifying requirements of software to be developed but it can also be applied to assist in the selection of in-house and commercial software products. The standard canbe used to create software requirements specifications directly or can be used as a model for defining a organization or project specific standard. It does not identify any specific method, nomenclature or tool for preparing an SRS.

## 1.3 Definitions, Acronyms, and Abbreviations

| | |
|---|---|
| SA | Savings Account |
| CA | Current Account |
| MAB | Minimum Account Balance |

## 1.4 References

The references are:


1. https://www.programiz.com/dsa/linked-list
2. https://www.javatpoint.com/file-handling-in-c
3. https://www.educative.io/answers/how-to-create-a-simple-thread-in-c


## 1.5 Overview

The remaining sections of this document provide a general description, including characteristicsof the users of this project, the product's hardware, and the functional and data requirements of the product. General description of the project is discussed in section 2 of this document.
Section 3 gives the functional requirements, system features and constraints made while designing the system. Section 3 also discusses the external interface requirements and gives detailed description of functional requirements. Section 4 is for supporting information.

# 2. Overall Description

The Traditional way of maintaining details of a user in a bank was to enter the details in a form and record them manually. Every time the user needs to perform some transactions he has to go to bank and perform the necessary actions, which may not be so feasible all the time. It may be a hard-hitting task for the users and the bankers too. The project gives real life understanding of Internet banking and activities performed by various roles in the supply chain. Here, we provide an automation for banking system through Internet. Internet banking system project captures activities performed by different roles in real life banking which provides enhanced techniques for maintaining the required in- formation up-to-date, which results in efficiency. The project gives real life understanding of Internet banking and activities performed by various roles in the supply chain.
It further lists and briefly describes the major features and a brief description of each of the proposed system.

# 3. Specific Requirements

The specific requirements are –

## 3.1 Functionality

Introduction –

This subsection contains the requirements for the online banking system. These requirements are organized by the features discussed in the case study provided to us. Features from case study are then refined into use case diagrams and to sequence diagram to best capture the functional requirements of the system.

### 3.1.1 Login

A. Customer : Customer logins by entering customer's account number & a login password.
B. Banker: Banker logins by entering banker's id & a login password.

### 3.1.2 Customer's Corner

3.1.2.1 Create_Account : The customer can create account by entering aadhar number and account type (SA or CA).Every Aadhar number entered should be unique. According to the type of account, MAB is added to the balance of created account.

MAB for following account type :

1. SA : Rs 5000
2. CA : Rs 10000

3.1.2.2 Do_Transaction

A. Deposit : This function will add the deposited amount to the current balance.

B. Withdraw : This function will deduct the withdraw amount from the current balance.

3.1.2.3 View_Balance : This function will display the details from customer file.

### 3.1.3 Banker's Corner

3.1.3.1 Edit_Customer_Details: The banker can edit the customer's name , account type and balance.

3.1.3.2 Delete_Customer_Details: The entire customer record is deleted from database.

3.1.3.3 Do_Transfer : The banker transfers the amount from source account to destination account.

3.1.3.4 Get_Transaction_Report :The bank statement showing credit and debit information of corresponding account must be displayed on the screen.

3.1.3.5 Get_Customer_Report: The bank statement showing customer details, credit and debit information of corresponding customer account must be displayed on the screen.

## 3.2 System Features

### 3.2.1 Reliability & Availability

The system is available when the user requests for service. The system is available 24/7.

### 3.2.2 Performance

The system will work on the user's terminal. The performance shall depend upon hardware components of the banker/customer and the internet connection .

### 3.2.3 Security

#### 3.2.3.1 Login

The customer can login the banking application to check the balance directly using his banking password. After login the customer is also allowed to change this password. The banker can login with a administrative password to edit or delete the customer details and transfer money from one account to another**.**

#### 3.2.3.2 Token

For any deposit/withdraw transaction the customer needs to acquire a token and only then he/she can go ahead with transaction. When the bank personnel try to transfer money from one account to another then also, they need to acquire the token .This is to prevent concurrency problem which can lead to multiple access to the account at the same time.

### 3.2.4 Supportability

The system is easy to maintain.

## 3.3 Design Constraints

The banking application system is built using only C language which puts certain limitation to the visual appeal of the software.

## 3.4 Usability

The banking system is essential for keeping digital records of customer data. The banking system is the process of storing and tracking data on customers and leads. The software can handle basic information such as name and account details as well as transaction details .

## 3.5 Interfaces

There are many types of interfaces as such supported by the bank application system namely : Software Interface and Hardware Interface.

### 3.5.1 Hardware Interfaces

Since the application must run over the internet, all the hardware shall require to connectinternet will be hardware interface for the system.

Various interfaces for the product could be

1. Touch screen/Monitor with 8 GB RAM
2. Keypad
3. Continuous battery backup
4. Interface that connects the device to bank's computer.

### 3.5.2 Software Interfaces

1 Any Linux operating system.
2 Programming Language : C Language
3 The final application must be packaged in a set up program, so that the application can be easily installed on machines. This application must be networked to corresponding banks

## 3.6 Licensing Requirements

Not Applicable

### 3.7 Applicable Standards

It shall be as per the industry standard.

## 4. Supporting Information

Please refer the following document:

1. Case study 5 Banking Application System