Software Requirement Specifications

For

Online Banking System

Version 1.0 approved

prepared by Aashish Budania

Roll Number - 15IT101

National Institute of Technology Karnataka , Surathkal.

09 Jan 2018

Table of Contents Page

Revision History

Name	Date	Reason for Changes	Version

1.Introduction

This web application must be easy to use and at the same time be sufficiently featuring rich to manage all the site content. It needs to be suitably intuitive for a committed webmaster who wishes to personalize the site.

1.1 Purpose

Online banking, also known as internet banking, e-banking or virtual banking, is an electronic payment system that enables customers of a bank or other financial institution to conduct a range of financial transactions through the financial institution's website.

1.2 Document Conventions

This document as software requirement specifications for the project named “Online Banking ” is written with 3 type of fonts using times new roman type of text with font 14(Bold) , 14 , 12 . The document is written to have all the specific and important requirements for the project.

1.3 Intended Audience and Reading Suggestions

The document for software requirement specifications for the project named “Online Banking” is written for developers , users , students , teachers , testers and the one who wants to under--stand the initial requirements of the project.

1.4 Product Scope

As online banking can be defined as electronic payment system that enables customers of a bank or other financial institution to conduct a range of financial transactions through the financial institution's website. So scope of online banking can be narrated in the benefit of personal and organisations and saving a lot of time and physical work.

1.5 References

These are some of the references to write this SRS -

- https://www.geeksforgeeks.com
- https://www.tutorials.com
- https://www.onedesk.com/writing-a-software-requirements-specification-document/
- https://microtoolsinc.com/Howsrs.php/

2.Overall Description

2.1 Product Perspective

The Online Banking System is the software, which manages the various users with independe--nt access. The Online Banking is a special order software system. It will be used in the stated configuration of online.

2.2 Product Functions

The typical bank customer will be a person, from the age of 18 and up. There will more than likely be a fairly equal distribution of males and females. The typical customer might not know anything about computers, so their system needs to be very simple and easy to use.The information of all the users must be stored in a database that is accessible by the Online System.The Online Banking System is connected and is running all 24 hours a day. The users access the Online System from any computer that has Internet browsing capabilities and an Internet connection. The users must have their correct usernames and passwords to enter into the Online Dictionary System.

2.3 User Classes and Characteristics

When it comes to classes to add the functionality in terms of withdraw,deposit,transfer money ,mini statement , user authentication etc. object oriented programming will be used and based on these tasks classes will be included in the project.

2.4 Operating Environment

Operating Environment for the “Online Banking System” is the real world but using the machines such as personal computer , smartphone using a internet connection to have a connectivity with the server. In this case the server is used as localhost and the no internet connection to access the database of localhost.

2.5 Design and Implementation Constraints

The “Online Banking System” shall run on an embedded system that handles safety-critical functionality. The system shall use a real-time processor with dynamic memory allocation inorder to handle continuous activity . Also, user and software interfaces shall be simple and user-friendly. The software shall adhere to Account Department codes and regulations, and Building codes related to public accounts safety.This software shall run only on an internet, it must be easily transferable to the field.Admin perform the operation in online either offline.

3.External Interface Requirements

3.1 User Interfaces

The User Interface defines the human-computer interaction of the Online Banking system.The system requires interaction from various users . The standard existing users or customers interact with the online interface within the banking System. The existing user interacts with the system to allow or authenticate for deposit, withdrawn,transfer and balance queries. The new user interacts with the system to register and apply to the Online Banking transactions.The administrator interacts with the system within the master control unit. These people are given special preference privileges (usually reserved for maintenance crew or building databases) and manage all type of users.

3.2 Hardware Interfaces

The software shall interface with the electromechanical that controls the online connection sys--tems. The software shall interface with a breaking mechanism in case of emergencies. The transactions and accesses shall be controlled by the software based on command and graphical user inputs. The hardware interface is supported by the main control panels (buttons, keyboard, mouse and communication mediums).

Other Hardware Requirements are -

- Standard PC
- Internet Connection (Not required in case of localhost)
- 128 MB or more RAM(256 MB is recommended)
- At least 500MB Hard Disk
- An efficient processor as more than 1.7 GHz class

3.3 Software Interfaces

Software interface is supported by the main control panels and operating system in which hosts the algorithms for calculating distributed travel and wait time information.Additionally, the algorithms define and export system commands for main control panels, and communica--tion mediums. For testing purposes the software shall be capable of interfacing with software simulators on a PC computer using GUI applications of webpages.

3.4 Communication Interfaces

All system interfaces communicate in order to activate ordered requests. The communication mediums (wired or wireless) are the external interface that communicates with the control panel of the Online Banking System. This communication allows for failure messages, and requests to be sent and received by the main system.

4.System Features

Online Banking System will have the features as per the user's concern in the terms of transactions , mini statement , withdraw money , transfer money using the content of users as per the specific database that should be available in the bank's database.If no such record is available then request is made for the new registration.

4.1 Registration and Login

In the Online Banking System considering the terms of the use if the user exists in the database or the user has already registered then he is able to use the system for his/her own needs as we he/she wants to deposit or withdraw money and to check for the mini statement etc. And non-existing user can also create and login using his/her account and can use the Online Banking to To reduce the physical efforts in real life.

4.2 Simple Transactions

In today's world all the systems that are created or used to replace the traditional systems or an efficient improvement over the existing system have a specific aim that should have more better functionality and more reliable to use against the existing system.So Online Banking System is created in a very simple way to use for the people's use in their real life.

4.3 Time Saver using Online Tools

If we discuss the central idea of computer science , it is bound between time and space and the interesting fact is that reducing one of them leads to increment of other one. So time is given more value than space , so transactions are very fast using Online Banking and smooth too , Just sitting on a place or anywhere just using the personal computer or smartphone.

4.4 Less physical efforts

This can be understood using the comparison between the new system as Online Banking System that is described in this SRS and the traditional system with the physical presence of a person in the bank and doing all the stuff as dealing with his/her own bank account in the bank to complete his needs. Obviously the working time period is fixed and the transaction consumes a lot of efforts for the access. So in order to reduce the physical efforts this project is very efficient.

5.Other Non-Functional Requirements

Non functional requirements are the most important requirements because they define the logic and functional requirements for the projects and building such project is a matter of benefit in the real life for the use and improving the lifestyle of daily use. So some of the non functional requirements are listed here.

5.1 Performance Requirements

The users of the system are members and the administrators who maintain the system. The members are assumed to have basic knowledge of the computers and Internet browsing. The administrators of the system to have more knowledge of the internals of the system and is able to rectify the small problems that may arise due to disk crashes, power failures and other catastrophes to maintain the system. The proper user interface, user's manual, online help and the guide to use and maintain the system must be sufficient to educate the users on how to use the system without any problems.

5.2 Reliability

The system is safety critical. If it moves out of normal operation mode, the requirement to drop to the next lower floor and open its doors is given priority. This emergency behavior shall not occur without reason. The system has to be very reliable due to the importance of data and the damage sin correct or incomplete data can do.

5.3 Availability

When in normal operating conditions, request by a user for an servicer shall be handled within very less time.The system is available 100% for the user and is used 24 hrs.A dayand 365 days a year. The system shall be operational 24 hours a day and 7 days a week.

5.4 Security Requirements

There shall be no security mechanisms in place to keep unwanted users out of the system. However, all users of the system shall not be able to perform actions or request actions from the Banking system,which will cause harm to any person or damage to the system or its env--ironment.

6.Diagrams

6.1 Use Case Diagram

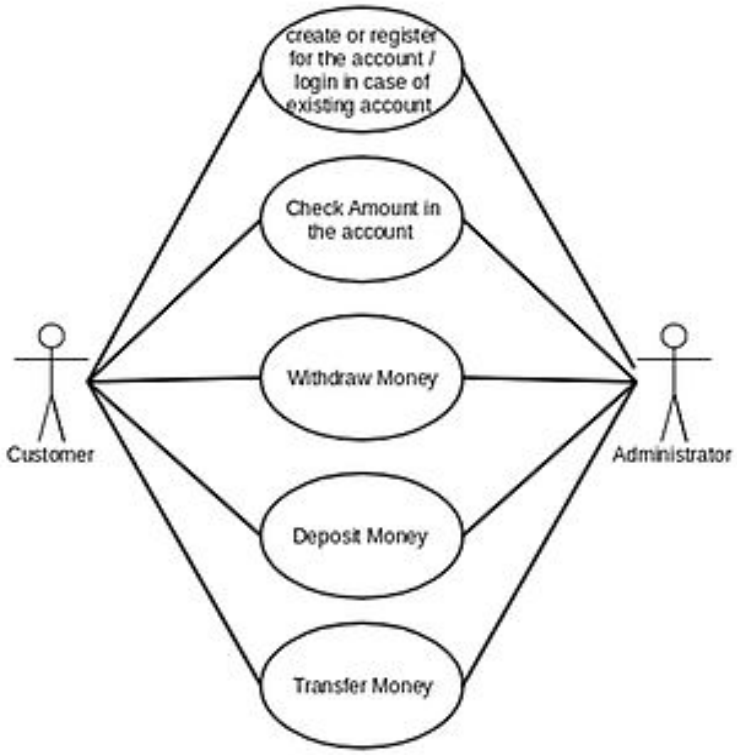

Figure - Use case diagram for online Banking

6.2 Sequence Diagrams

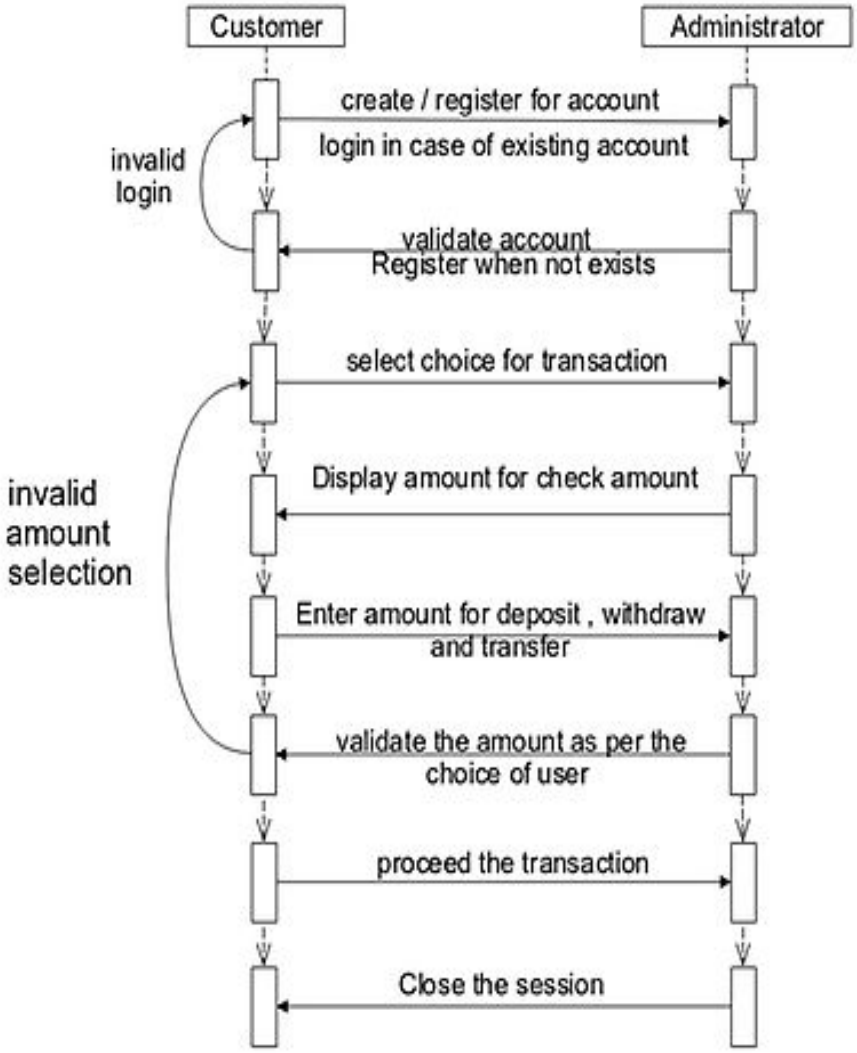

Figure - sequence diagram

6.3 Activity Diagram

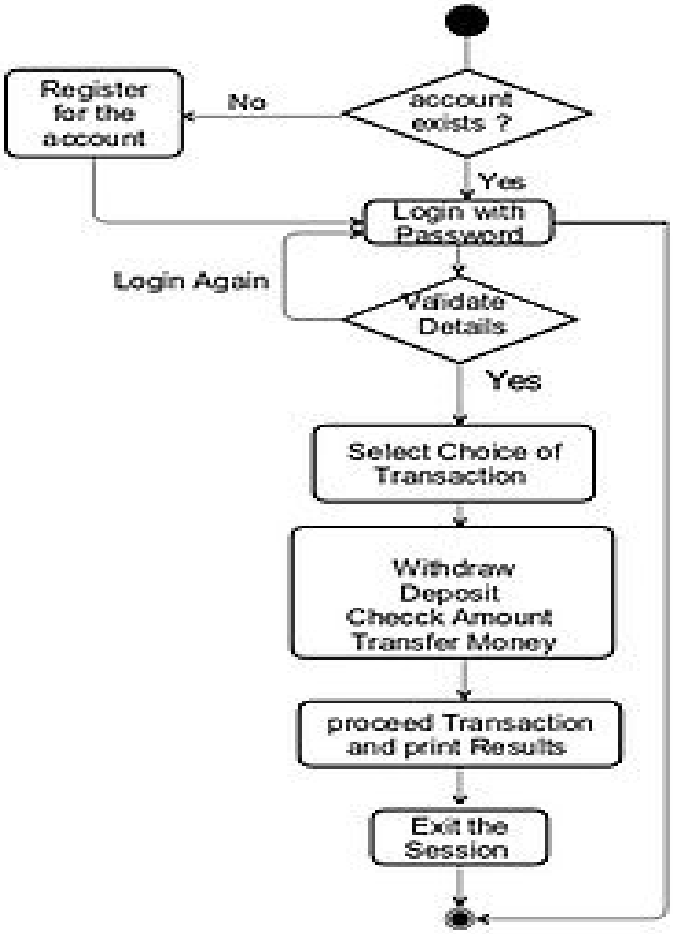

Figure - Activity Diagram

6.4 Collaboration Diagram

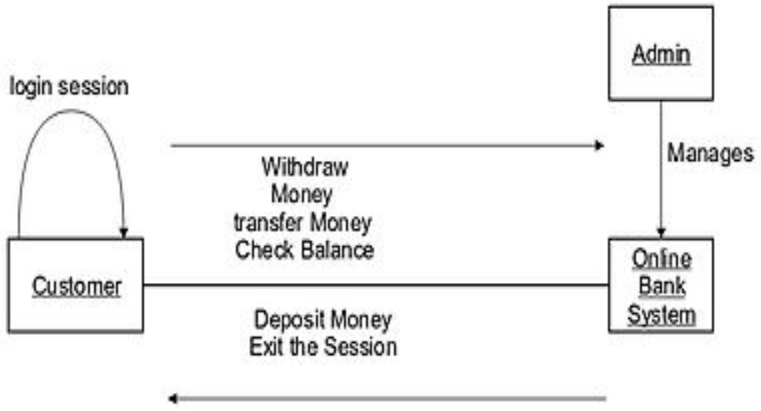

Figure - Collaboration Diagram

6.5 Class Diagram

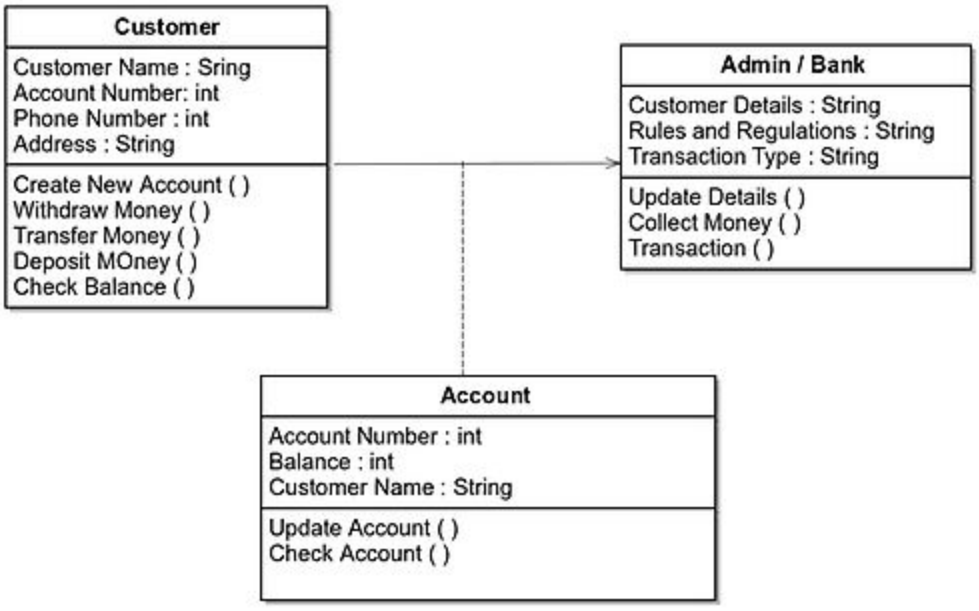

Figure - Class Diagram