



Software Requirements Specification

for

2. Banking Portal System

Version 0.2

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Course: CS4097D Object Oriented Systems
Laboratory

Date: 10/11/2022

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1 Introduction

1.1 Document Purpose

The project is to create a Banking Portal System which could be set up at a kiosk in a bank. This small desktop application will support bank account holders to perform basic banking activities. It will also facilitate the bank managers to supervise the bank operations and to provide customer service. The purpose is to showcase a mechanism to enable fast, contactless service for a user while maintaining a degree of security.

1.2 Product Scope

Users should be able to register through their already existing accounts or enabled to create a new account. They then have access to banking facilities such as transferring funds, checking account balance and viewing their bank statements.

The provision for bank managers to log in allows them to view the details of all existing accounts, classifying them based on various criteria as needed. They also provide services to users such as unblocking blocked accounts or changing their account type.

1.3 Definitions, Acronyms and Abbreviations

Abbreviation	Full-form
ATM	Automated Teller Machine
BPS	Banking Portal System
NRI	Non-Resident Indian

1.4 Document Conventions

Font style – Arial font size 12

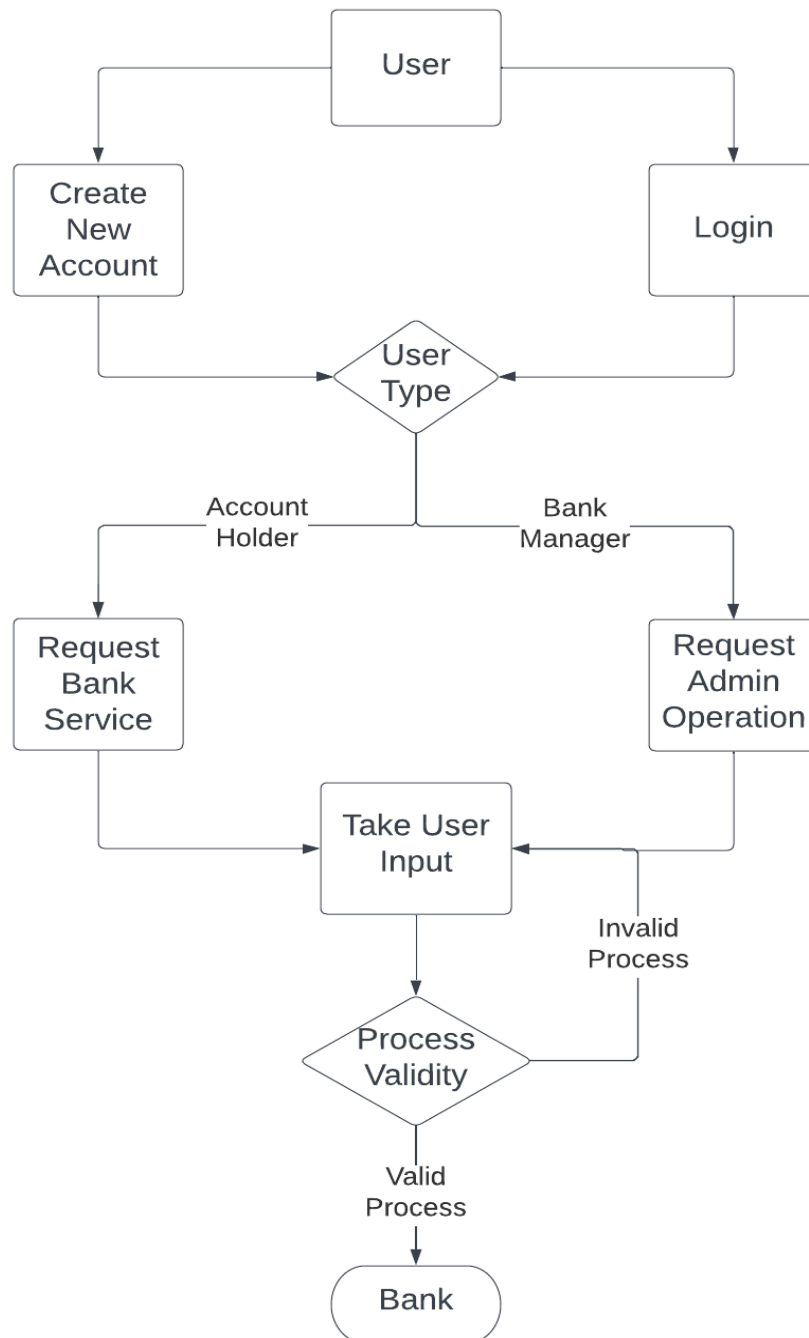
1.5 References and Acknowledgements

<https://www.javatpoint.com/uml-use-case-diagram> - Use Case Diagrams
<https://www.youtube.com/watch?v=zid-MVo7M-E> – Use Case conventions
<https://lucid.app/> - Creating the Use Case diagram

2 Overall Description

2.1 Product Overview

The product is an upgrade on the already existing self service bank kiosks, the passbook printing kiosk and the ATM kiosk, with a few additional functionalities. It acts as a self-contained product, contacting and updating the bank databases of users and transactions as required. The following flow diagram illustrates the working of the BPS.



2.2 Product Functionality

List of the major functions provided by the system for a User:

- Login
- Create New Account

List of the major functions provided by the system for an Account Holder:

- Change Password
- Check Balance
- Print Statement
- Transfer Funds
- Logout

List of the major functions provided by the system for a Bank Manager:

- Change Account Type
- Unblock Account
- View Transactions
- View All Accounts
- View All Indian Accounts
- View All NRI Accounts
- View All Blocked Accounts
- Logout

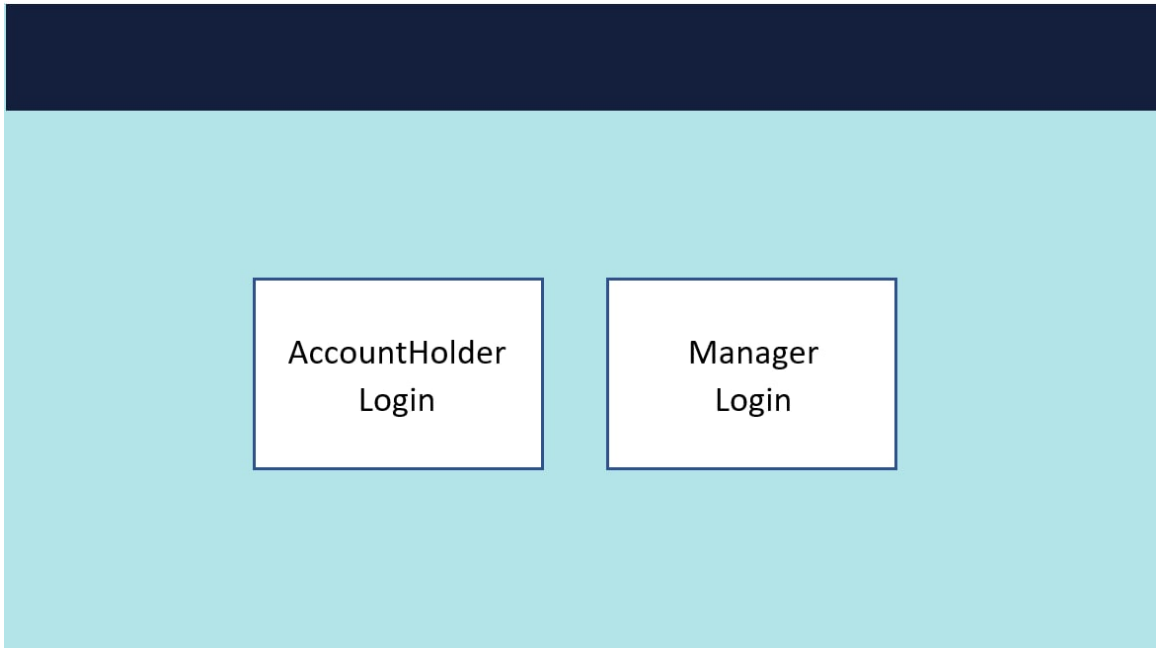
List of helper functions assisting the major functions:

- Check If Account Exists
- Check Transaction Validity
- Calculate Transaction Fees
- Block Account

3 Specific Requirements

3.1 User Interfaces

The following is the home screen of the kiosk:

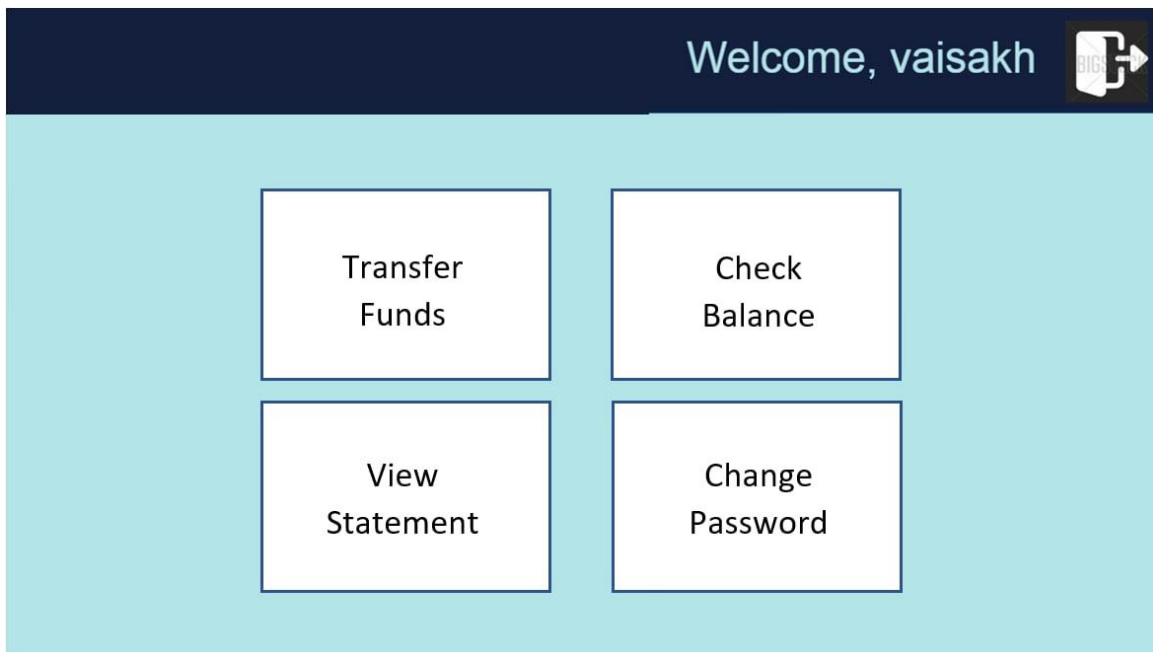


On clicking on AccountHolder Login, the User is led to the following screen where they are required to enter their credentials. The manager login is a similar screen without the create account options:

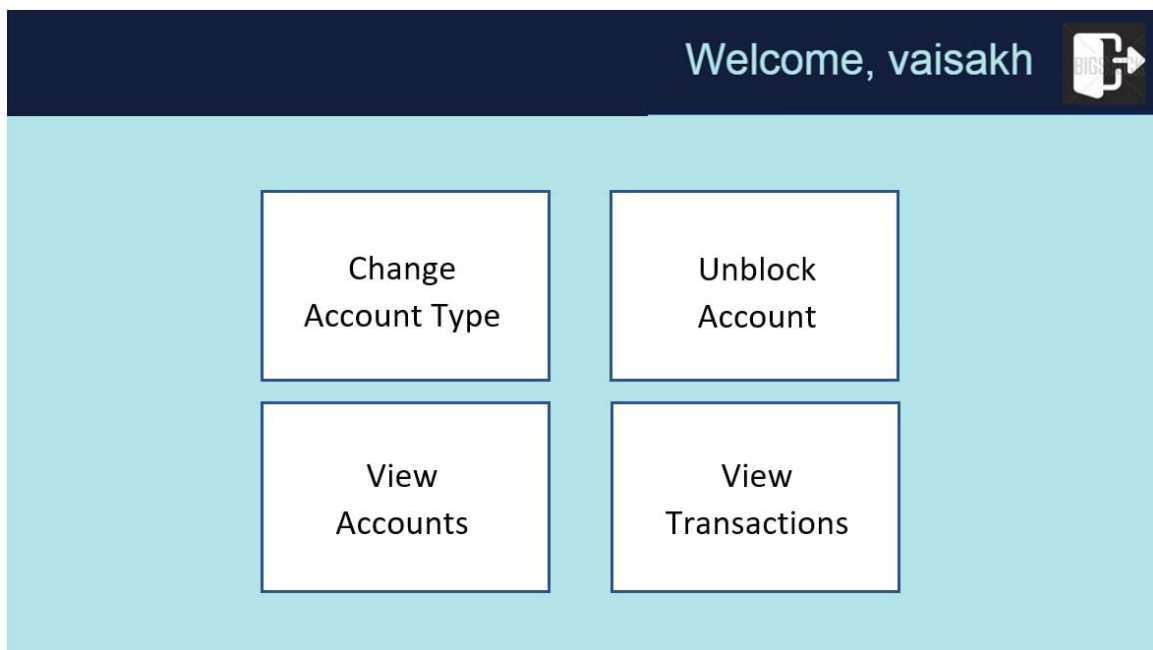
The image shows the login screen for an AccountHolder. It features a dark blue header bar at the top. Below the header, the background is light blue. The screen contains the following elements:

- A label "Username/Account Number" above a white input field.
- A red error message "Account does not exist" below the first input field.
- A label "Password" above a white input field.
- A red error message "Incorrect password" below the second input field.
- A white "Login" button below the password input field.
- Two stacked white buttons at the bottom: "Create new NRI Account" and "Create new Indian Account".

The Account Holder then has the following services available to them:



The Bank Manager is also given their set of services as shown below:



Each of these options for both types of users lead to individual functional interfaces that provide the desired service.

3.2 Functional Requirements

List of the major features provided/utilized by the system:

- Check if Account Exists: Checks if an account with given account number or username exists.
- Login: Allows user to log into their account.
- Create New Account: Allows a new user to create an account.
- Block Account: Blocks an account after five incorrect password attempts.
- Change Password: Allows an account holder to change their password.
- Check Balance: Displays the balance in the account.
- Print Statement: Displays the account statement.
- Transfer Funds: Allows account holder to send money to another account.
- Check Transaction Validity: Checks if the account maintains minimum balance after the transaction.
- Calculate Transaction Fees: Charges fee incurred during the transaction based on the user's account type.
- Logout: Logs the user out of their account.
- Change Account Type: Changes an NRI account to an Indian account.
- Unblock Account: Unblocks a blocked account.
- View Transactions: Displays all transactions through the bank.
- View Accounts: Displays all accounts or accounts falling under these criteria (NRI accounts, Indian accounts or blocked accounts).

3.3 Use Case Model

The following page contains a Use Case Model describing the functionality and interactions involved in the BPS.

