

Ex No: 4 AUTOMATED BANKING SYSTEM

PROBLEM DEFINITION

To develop an automated banking system, which is required to perform the following functions:

The customer logs into the system using card number and pin number. The system checks for validation.

The system queries the customer for the type of account either fixed deposit or credit account. After getting the type of account the system shows the balance left.

The system queries the customer for the transaction type either withdrawal or deposit and the required amount. The user enters the amount and the

transaction if carries out

SRS DOCUMENT FOR AUTOMATED BANKING SYSTEM

INTRODUCTION

Purpose

The purpose of this SRS is to describe the requirements involved in developing an Automated Banking System (ABS). The intended audience is any person who wants to create account.

To withdraw or deposit either in fixed deposit or credit account.

Scope

The product is titled Automated Banking System (ABS).

The product will perform the following tasks

Allow a new user to create an account, either fixed or credit account by entering the details and by depositing an initial amount.

Allow the existing user to enter his account details like card number, pin number and account type to view his balance.

Allow the existing user to deposit an amount by entering the amount to be deposited after the balance had been viewed. Allow the existing user to withdraw an amount by entering the amount to be withdrawn after the balance had been viewed. The primary benefits expected of the system are: user friendly, continuous connectivity without failure, fault tolerant and involves lesser manpower.

Definitions, Acronyms and Abbreviations ABS: Automated Banking System.

References

IEEE standard 830-1998 recommended practice for Software Requirements Specifications-Description.

IEEE Software Requirements Specifications Template
http://www.cas.master.ca/~curette/SE3M04/2003/files/srs_template.doc

Overview

- The SRS contains an analysis of the requirements necessary to help easy design.
- The overall description provides interface requirements for the Banking system, product perspective, hardware interfaces, software interfaces, communication interface, memory constraints, product functions, user characteristics and other constraints.
- Succeeding pages illustrate the characteristics of typical naïve users accessing the system along with legal and functional constraints enforced that affect banking system in any fashion.

THE OVERALL DESCRIPTION

Product perspective Hardware interfaces

Hard disk: The database connectivity requires a hardware configuration that is on-line. This makes it necessary to have a fast database system (such as any RDBMS) running on high rpm hard-disk permitting complete data redundancy and backup systems to support the primary goal of reliability.

The system must interface with the standard output device, keyboard and mouse to interact with this software.

Software interfaces

Back End: MS Access 2007

Front End: Microsoft Visual Basic 6.0

Operations

The user can create a new account.

The existing user can access his account and view his balance by entering his details.

The user can deposit and withdraw money from his account.

Product Functions Creating a New Account

The user should provide his personal details to facilitate the bank clerk to create a new account. The user should provide:

- Customer Name.
- Customer address.
- Required account type.
- Pin Number.
- Initial deposit.
- Operating with created account

The user should be able to operate with his new account after:

- Entering card number.
- Entering pin number.
- Entering the account type, transaction type and amount involved in the transaction.

User characteristics

The intended users of this software need not have specific knowledge as to what is the internal operation of the system. Thus the end user is at a high level of abstraction that allows easier, faster operation and reduces the knowledge requirement of end user

The Product is absolutely user friendly, so the intended users can be the naïve users.

The product does not expect the user to possess any technical background. Any person who knows to use the mouse and the keyboard can successfully use this product.

Constraints:

At the time of creating the new account, each user gives a pin number and is provided with a unique card number that must be used for further transactions. Hence the user is required to remember or store these numbers carefully.

At the time of creating the new account, the initial deposit should not be less than the specified amount.

SPECIFIC REQUIREMENTS

Logical Database Requirements

The system should contain databases that include all the necessary information for the product to function according to the requirements. These include relations such as Customer Details and Account Details.

Customer details refer to the customer's name and address. Account details of the customer include the card number, account type, transaction type and the pin number given by the user to be used at the time of the transaction at the bank.

FRONT – ENDDescription

The front end for the Automated Banking System (ABS) is designed using Microsoft Visual Basic 6.0. The front end contains a user-friendly interface. The first form contains a welcome screen that provides an option for the user to either create a new account or to operate through an existing account. The “create account” module contains a provision to create a new account after collecting the customer name, address and other details. The card number and pin number of the user is obtained every time there is a transaction. The user is requested to select the required type of transaction and the amount involved in the transaction.

BACK – ENDDescription

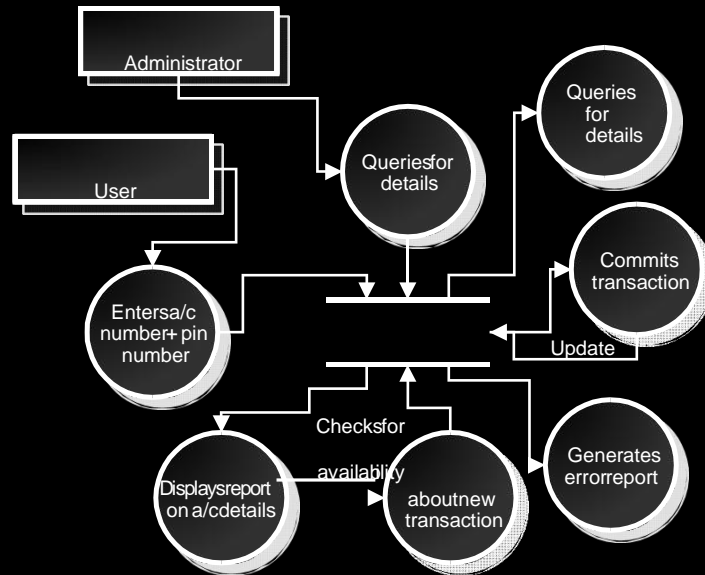
The Automated Banking System (ABS) database contains only one table. It correlates a unique card number, customer name, account type, pin number and the balance.

DATAStructures

ACCOUNT DETAILS

FIELD NAME	TYPE	CONSTRAINTS
NAME	TEXT	
ACC_NO	AUTONUMBER	NOT NULL
AGE	NUMBER	
GENDER	TEXT	
EMAIL	TEXT	
PHONE_NO	NUMBER	
PASSWORD	TEXT	
BALANCE	NUMBER	

DATA FLOWDIAGRAM:



TESTING

FORM NAME	INPUT	EXPECTED OUTPUT	ACTUAL OUTPUT	STATUS
MAIN MENU FORM	Menu Option	Required Form must be displayed	Required form was displayed	Pass
ACCOUNT CREATION FORM	User Details are entered	Create a new account	New account was created	Pass
LOGIN FORM	Account ID and password are entered	If passwords match, login	User permitted to perform further operations	Pass
WELCOME FORM	User can select deposit, withdraw or view balance	Show Deposit form or Withdraw form or view balance	Deposit form or withdraw form or balance is displayed	Pass
DEPOSIT FORM	Amount to be deposited is entered	Deposit amount	Amount was deposited	Pass
WITH DRAW FORM	Amount to be withdrawn is Entered	Withdraw amount	Amount was withdrawn	Pass

SAMPLEFORMS

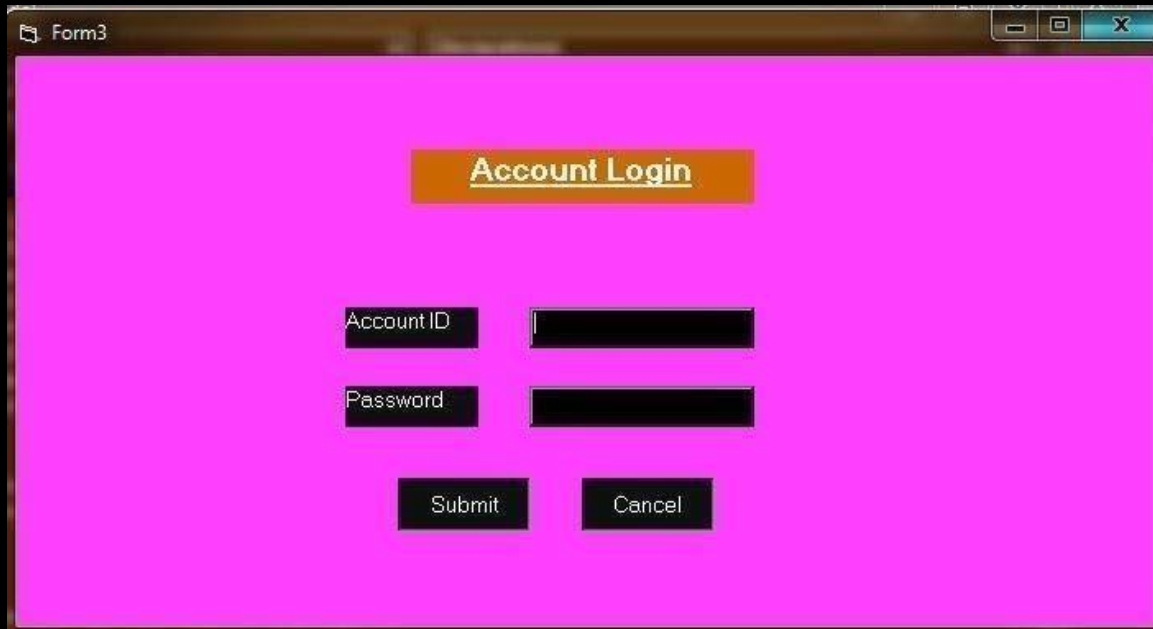
MAINMENUFORM

The screenshot shows a window titled "Form1" with a light blue background. At the top center, there is a label "Banking Management System" in a blue box with a red border. Below this label, three buttons are arranged vertically in the center: "Create an Account" (blue with a red border), "User Login" (blue), and "Exit" (blue). The window has standard Windows-style title bar controls (minimize, maximize, close) in the top right corner.

ACCOUNT CREATION FORM

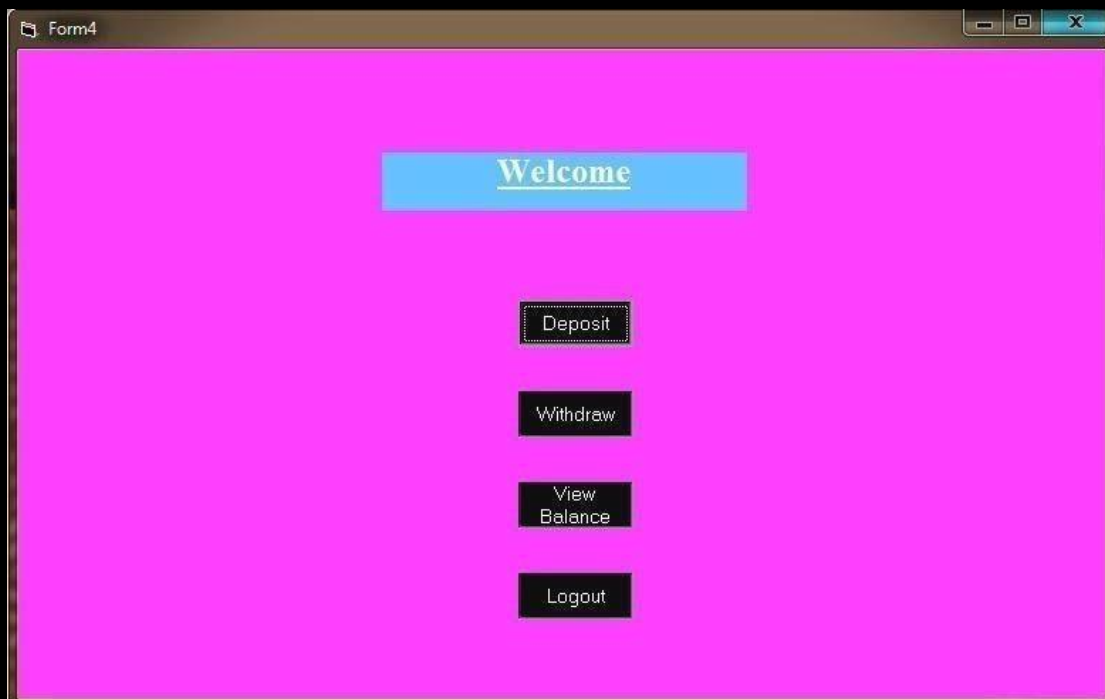
The screenshot shows a window titled "Form2" with a light blue background. At the top center, there is a label "Create an Account" in a blue box with a red border. Below this label, there are several input fields and a dropdown menu arranged vertically: "Name of Account Holder" (text box), "Age" (text box), "Gender" (dropdown menu), "Permanent Address" (text box), "Email ID" (text box), "Phone Number" (text box), "Enter Password" (text box), and "Re-enter Password" (text box). At the bottom center, there are two buttons: "Submit" and "Cancel". The window has standard Windows-style title bar controls (minimize, maximize, close) in the top right corner.

LOGIN FORM



The screenshot shows a window titled "Form3" with a light blue background. At the top center, there is a red rectangular button with the text "Account Login" in white, underlined. Below this, there are two input fields. The first is labeled "Account ID" and the second is labeled "Password". Both labels are in a light blue box. Below the input fields, there are two buttons: "Submit" and "Cancel", both in light blue boxes.

WELCOME FORM



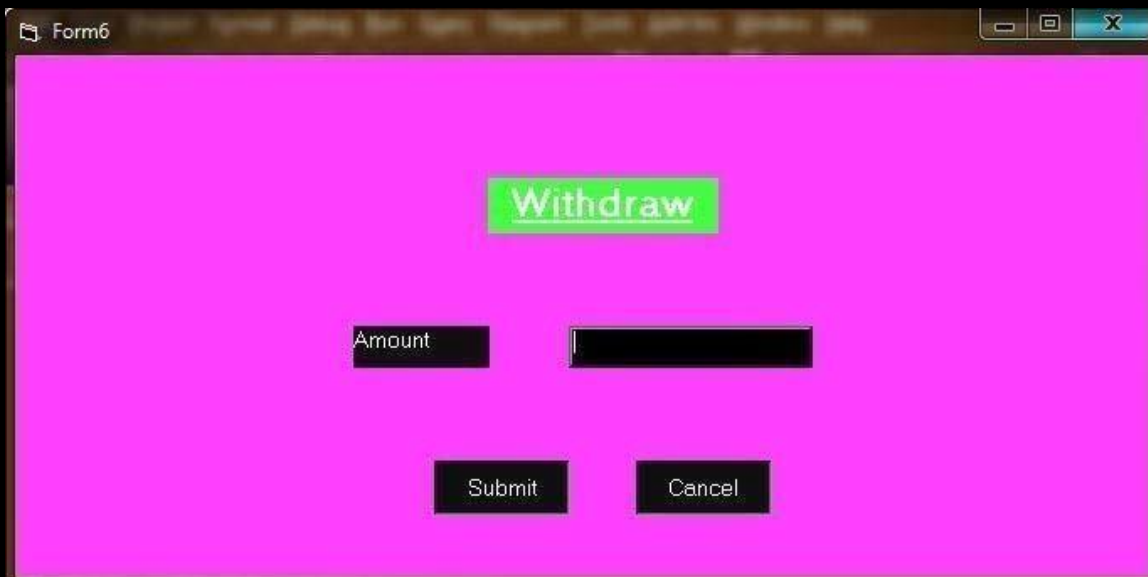
The screenshot shows a window titled "Form4" with a light blue background. At the top center, there is a red rectangular button with the text "Welcome" in white, underlined. Below this, there are four buttons arranged vertically: "Deposit", "Withdraw", "View Balance", and "Logout". Each button is in a light blue box.

DEPOSIT FORM



The screenshot shows a window titled 'Form5' with a red background. At the top center is a red button with the text 'Deposit'. Below this, on the left, is a label 'Amount' in a black box. To the right of the label is a white text input field. At the bottom, there are two black buttons: 'Submit' on the left and 'Cancel' on the right.

WITHDRAW FORM



The screenshot shows a window titled 'Form6' with a green background. At the top center is a green button with the text 'Withdraw'. Below this, on the left, is a label 'Amount' in a black box. To the right of the label is a white text input field. At the bottom, there are two black buttons: 'Submit' on the left and 'Cancel' on the right.

RESULT

Thus, the requirements involved in developing an Automated Banking System was completed successfully.