ATM SIMULATOR

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Introduction

An ATM simulator is a software program that mimics the functionality of a real ATM machine, allowing users to perform various banking transactions in a simulated environment.

Objective

The main objective of this project is to design and develop an ATM SIMULATOR that can perform the following tasks:

* Users can withdraw and deposit money.
* View their balance
* Change their PIN

Methodology

The system has the following functions:

void displayMenu() :To show the display menu

void withdraw(): To withdraw money

void deposit(): To deposit money

void checkBalance(): To check balance

void changePin() : To change PIN

Code

#include <stdio.h>

#include <stdlib.h>

// Function prototypes

void displayMenu();

void withdraw();

void deposit();

void checkBalance();

void changePin();

// Global variables

int balance = 10000;

int pin = 1234;

int main() {

int choice;

printf("\*\*\* Welcome to the ATM machine \*\*\*\n");

printf("Please enter your 4-digit PIN: ");

scanf("%d", &pin);

while (1) {

displayMenu();

printf("Enter your choice: ");

scanf("%d", &choice);

switch (choice) {

case 1:

withdraw();

break;

case 2:

deposit();

break;

case 3:

checkBalance();

break;

case 4:

changePin();

break;

case 5:

printf("Thank you for using the ATM machine. Goodbye!\n");

exit(0);

default:

printf("Invalid choice. Please try again.\n");

}

}

return 0;

}

// Function to display the menu

void displayMenu() {

printf("\nMenu:\n");

printf("1. Withdraw money\n");

printf("2. Deposit money\n");

printf("3. Check balance\n");

printf("4. Change PIN\n");

printf("5. Exit\n");

}

// Function to withdraw money

void withdraw() {

int amount;

printf("Enter the amount to withdraw: ");

scanf("%d", &amount);

if (amount > balance) {

printf("Insufficient balance. Please try again.\n");

} else {

balance -= amount;

printf("Withdrawal successful. Your new balance is %d.\n", balance);

}

}

// Function to deposit money

void deposit() {

int amount;

printf("Enter the amount to deposit: ");

scanf("%d", &amount);

balance += amount;

printf("Deposit successful. Your new balance is %d.\n", balance);

}

// Function to check balance

void checkBalance() {

printf("Your balance is %d.\n", balance);

}

// Function to change PIN

void changePin() {

int newPin, confirmPin;

printf("Enter your new 4-digit PIN: ");

scanf("%d", &newPin);

printf("Confirm your new 4-digit PIN: ");

scanf("%d", &confirmPin);

if (newPin == confirmPin) {

pin = newPin;

printf("PIN changed successfully.\n");

} else {

printf("PINs do not match. Please try again.\n");

    }

}

Conclusion

In summary, an ATM simulator is a software program that simulates the functions of a real ATM machine, providing users with a simulated banking experience.