|  |
| --- |
| #include <iostream> |
|  | #include <string.h> |
|  | #include <cstdlib> |
|  |  |
|  | using namespace std; |
|  |  |
|  | struct Address |
|  | { |
|  | string city; |
|  | string woreda; |
|  | string house\_num; |
|  | }; |
|  | struct BOD |
|  | { |
|  | int date; |
|  | int month; |
|  | int year; |
|  | }; |
|  | struct info |
|  | { |
|  | char name[20]; |
|  | int accountNum; |
|  | int amount; |
|  | Address addr; |
|  | BOD birth; |
|  | char id[20]; |
|  | char residence; |
|  | int age; |
|  | char sex; |
|  | char emp\_type; |
|  | }; |
|  |  |
|  | void create\_acc(); |
|  | bool accNum\_checker(int,int); |
|  | bool accMoney\_checker(int, int); |
|  | void deposit(); |
|  | void withdraw(); |
|  | void tranfer(); |
|  | void modify(); |
|  | void showInfo(); |
|  | void deleteAcc(); |
|  |  |
|  | int counter = 0; |
|  | info \*client[10]; |
|  |  |
|  | int main() |
|  | { |
|  | system ("color 3E"); |
|  | int choice; |
|  | bool isDone = true; |
|  | while (isDone) |
|  | { |
|  | choice: |
|  | cout << "\n------------------Menu------------------------\n"; |
|  | cout << "Enter 1 to create new account.\n"; |
|  | cout << "Enter 2 to deposit money on your account.\n"; |
|  | cout << "Enter 3 to withdraw money from your account.\n"; |
|  | cout << "Enter 4 to transfer money.\n"; |
|  | cout << "Enter 5 to modify your personal information.\n"; |
|  | cout << "Enter 6 to see your information.\n"; |
|  | cout << "Enter 7 to delete your account.\n"; |
|  | cout << "Enter 0 to exit.\n"; |
|  | cin >> choice; |
|  |  |
|  | switch (choice) |
|  | { |
|  | case 1: |
|  | create\_acc(); |
|  | break; |
|  | case 2: |
|  | deposit(); |
|  | break; |
|  | case 3: |
|  | withdraw(); |
|  | break; |
|  | case 4: |
|  | tranfer(); |
|  | break; |
|  | case 5: |
|  | modify(); |
|  | break; |
|  | case 6: |
|  | showInfo(); |
|  | break; |
|  | case 7: |
|  | deleteAcc(); |
|  | break; |
|  | case 0: |
|  | isDone = false; |
|  | break; |
|  | default: |
|  | cout<<"Wrong entry. Please select the correct choice."; |
|  | goto choice; |
|  | } |
|  | } |
|  | return 0; |
|  | } |
|  |  |
|  | void create\_acc() |
|  | { |
|  | client[counter] = new info; |
|  | cout << "Enter your full name: "; |
|  | cin.ignore(); |
|  | cin.getline(client[counter]->name,20); |
|  | cout << "\nEnter your address: "; |
|  | cout << "\nCity: "; |
|  | cin >> client[counter]->addr.city; |
|  | cout << "\nWoreda: "; |
|  | cin >> client[counter]->addr.woreda; |
|  | cout << "\nHouse number: "; |
|  | cin >> client[counter]->addr.house\_num; |
|  | cout << "\nEnter your date of birth: "; |
|  | cout << "\nDate: "; |
|  | cin >> client[counter]->birth.date; |
|  | cout << "\nMonth: "; |
|  | cin >> client[counter]->birth.month; |
|  | cout << "\nYear: "; |
|  | cin >> client[counter]->birth.year; |
|  | cout << "Enter government ID or passport number or driving licence: "; |
|  | cin >> client[counter]->id; |
|  |  |
|  | client[counter]->accountNum = 1000 + counter; |
|  | cout << "\nYou have successfully created an account.\n"; |
|  | cout << "Your account number is: " << client[counter]->accountNum; |
|  | cout << "\nEnter the amount of money you want to deposit: "; |
|  | cin >> client[counter]->amount; |
|  | //showInfo(client[]); |
|  |  |
|  | counter++; |
|  | } |
|  | bool accNum\_checker(int accountNum,int \*index) |
|  | { |
|  | bool exist; |
|  | for(int i=0;i<counter;i++){ |
|  | if(accountNum=client[i]->accountNum) |
|  | { |
|  | \*index=i; |
|  | exist=true; |
|  | } |
|  | else |
|  | exist=false; |
|  | } |
|  | return exist; |
|  | } |
|  | void deposit() |
|  | { |
|  | system("cls"); |
|  | int accNo, account\_user\_index = 0; |
|  | float depo; |
|  | bool check; |
|  | no: |
|  | cout << "please enter account number : "; |
|  | cin >> accNo; |
|  | check = account\_checker(accNo, &account\_user\_index); |
|  | if (check == true) |
|  | { |
|  | cout << "please the amount you would like to deposit: "; |
|  | cin >> depo; |
|  | user[account\_user\_index]->balance += depo; |
|  | if (user[account\_user\_index]->account\_type == acctype[0]) |
|  | { |
|  | interest\_counter++; |
|  | } |
|  | else |
|  | { |
|  | bool accMoney\_checker(int money, int index) |
|  | { |
|  | bool exist; |
|  | for(int i=0;i<counter;i++){ |
|  | if((client[index]->amount-money)>0) |
|  | exist=true; |
|  | else |
|  | exist=false; |
|  | } |
|  | return exist; |
|  | } |
|  | void withdraw() |
|  | { |
|  | int index=0; |
|  | bool check; |
|  | bool checkMoney; |
|  | int money; |
|  | int accountNum; |
|  | cout << "Enter our account number: "; |
|  | cin >> accountNum; |
|  | check=accNum\_checker(accountNum,&index); |
|  |  |
|  | if(check==true){ |
|  |  |
|  | cout << "Enter the amount of money you want to withdraw: "; |
|  | cin >> money; |
|  | checkMoney=accMoney\_checker(money,index); |
|  | if(checkMoney==true){ |
|  | client[index]->amount -= money; |
|  | cout << "You have withdraw " << money << "birr\n"; |
|  | cout << "Your current account balance is " << client[index]->amount << endl; |
|  | } |
|  | else |
|  | cout<<"Sorry you can not withdraw with your current balance."; |
|  | } |
|  | else |
|  | cout << "There is no account with this name and account number."; |
|  | } |
|  |  |
|  | void tranfer() |
|  | { |
|  | int senderIndex=0; |
|  | int recieverIndex=0; |
|  | bool checkSender; |
|  | bool checkReciever; |
|  | bool checkMoney; |
|  | int money; |
|  | int senderAccountNum; |
|  | int recieverAccountNum; |
|  | cout << "Enter our account number: "; |
|  | cin >> senderAccountNum; |
|  | checkSender=accNum\_checker(senderAccountNum,&senderIndex); |
|  |  |
|  | if(checkSender==true){ |
|  | cout << "Enter the account number you want to transfer money to: "; |
|  | cin >> recieverAccountNum; |
|  | checkReciever=accNum\_checker(recieverAccountNum,&recieverIndex); |
|  |  |
|  | if(checkReciever==true){ |
|  | cout << "Enter the amount of money you want to transfer: "; |
|  | cin >> money; |
|  |  |
|  | checkMoney=accMoney\_checker(money,senderIndex); |
|  | if(checkMoney==true){ |
|  | client[senderIndex]->amount -= money; |
|  | client[recieverIndex]->amount += money; |
|  | cout << "You have successfully transfer " << money << "birr to the account number "<<recieverAccountNum; |
|  | cout << "\nYour current account balance is " << client[senderIndex]->amount << endl; |
|  |  |
|  | } |
|  | else |
|  | cout<<"Sorry you can not transfer with your current balance."; |
|  |  |
|  |  |
|  | } |
|  | else |
|  | cout << "There is no account with this account number."; |
|  |  |
|  | } |
|  | else |
|  | cout << "There is no account with this account number."; |
|  |  |
|  | } |
|  | void modify() |
|  | {  int accNo, account\_user\_index = 0;  bool check;  no:  cout << "please enter account number : ";  cin >> accNo;  check = account\_checker(accNo, &account\_user\_index);  if (check == true)  {  cout << "what is your first name: ";  cin >> user[account\_user\_index]->user\_name.fname;  cout << "what is your middle name: ";  cin >> user[account\_user\_index]->user\_name.mname;  cout << "what is your last name: ";  cin >> user[account\_user\_index]->user\_name.lname;  user[account\_user\_index]->user\_name.full\_name = user[account\_user\_index]->user\_name.fname + " " +  user[account\_user\_index]->user\_name.mname + " " +  user[account\_user\_index]->user\_name.lname;  cout << "what is your age: ";  cin >> user[account\_user\_index]->age;  cout << "what is your gender: ";  cin >> user[account\_user\_index]->sex;  cout << "what is your date of birth: [day] ";  cin >> user[account\_user\_index]->d\_bate.day;  cout << "what is your date of birth: [month] ";  cin >> user[account\_user\_index]->d\_bate.month;  cout << "what is your date of birth: [year] ";  cin >> user[account\_user\_index]->d\_bate.year;  cout << "what is your address 1: ";  cin >> user[account\_user\_index]->location.address\_1;  cout << "what is your address 2: ";  cin >> user[account\_user\_index]->location.address\_2;  cout << "what is your postal code: ";  cin >> user[account\_user\_index]->location.po\_box;  }  else  {  cout << "the account number you entered doesnot match any account holder in the datatbase:"  << "please enter the account number correctly!\n";  goto no;  }  } |
|  | } |
|  | void showInfo() |
|  | { |
|  | int accountNum; |
|  | cout << "Enter our account number: "; |
|  | cin >> accountNum; |
|  | for(int i=0;i<counter;i++){ |
|  | if(accountNum=client[i]->accountNum) |
|  | { |
|  | cout << "\nName: " << client[i]->name; |
|  | cout << " \n Address "; |
|  | cout << "\nCity: " << client[i]->addr.city; |
|  | cout << "\nWoreda: " << client[i]->addr.woreda; |
|  | cout << "\nHouse number: " << client[i]->addr.house\_num; |
|  | cout << "\nYour date of birth: "; |
|  | cout << "\nDay: " << client[i]->birth.date; |
|  | cout << "\nMonth: " << client[i]->birth.month; |
|  | cout << "\nYear: " << client[i]->birth.year; |
|  | cout << "\nGovernment ID or passport number or driving licence: " << client[i]->id, 20; |
|  | cout << "\nAccount number: " << client[i]->accountNum; |
|  | cout << "\nCurrent amount of money : " << client[i]->amount; |
|  | } |
|  | } |
|  | } |
|  |  |
|  | void deleteAcc() |
|  | { |
|  | } |