

```

// C program to implement
// the above approach
#include <conio.h>
#include <stdio.h>
#include <stdlib.h>
#include <string.h>
#include <windows.h>

// Declaring all the functions
void checkbalance(char*);
void transfermoney(void);
void display(char*);
void person(char*);
void login(void);
void loginsu(void);
void account(void);
void accountcreated(void);
void afterlogin(void);
void logout(void);

// Declaring gotoxy
// function for setting
// cursor position
void gotoxy(int x, int y)
{
    COORD c;
    c.X = x;
    c.Y = y;

    SetConsoleCursorPosition(
        GetStdHandle(STD_OUTPUT_HANDLE), c);
}

// Creating a structure to store
// data of the user
struct pass {
    char username[50];
    int date, month, year;
    char pnumber[15];
    char adharnum[20];
    char fname[20];
    char lname[20];
    char fathname[20];
    char mothname[20];

```

```

        char address[50];
        char typeaccount[20];
};

// Structure to keep track
// of amount transfer
struct money {
    char usernameto[50];
    char userpersonfrom[50];
    long int money1;
};

struct userpass {
    char password[50];
};

// Driver Code
int main()
{
    int i, a, b, choice;
    int passwordlength;

    gotoxy(20, 3);

    // Creating a Main
    // menu for the user
    printf("WELCOME TO BANK ACCOUNT SYSTEM\n\n");
    gotoxy(18, 5);

    printf("*****");
    gotoxy(25, 7);

    printf("DEVELOPER-Naman kumar");

    gotoxy(20, 10);
    printf("1.... CREATE A BANK ACCOUNT");

    gotoxy(20, 12);
    printf("2.... ALREADY A USER? SIGN IN");
    gotoxy(20, 14);
    printf("3.... EXIT\n\n");

    printf("\n\nENTER YOUR CHOICE..");

```

```

scanf("%d", &choice);

switch (choice) {
case 1:
    system("cls");
    printf("\n\n USERNAME 50 CHARACTERS MAX!!");
    printf("\n\n PASSWORD 50 CHARACTERS MAX!!");
    account();
    break;

case 2:
    login();
    break;

case 3:
    exit(0);
    break;

    getch();
}
}

```

```

// Function to create accounts
// of users
void account(void)
{
    char password[20];
    int passwordlength, i, seek = 0;
    char ch;
    FILE *fp, *fu;
    struct pass u1;
    struct userpass p1;

    struct userpass u2;

    // Opening file to
    // write data of a user
    fp = fopen("username.txt", "ab");

    // Inputs
    system("cls");
    printf("\n\n!!!!CREATE ACCOUNT!!!!");

    printf("\n\nFIRST NAME..");

```

```

scanf("%s", &u1.fname);

printf("\n\n\nLAST NAME..");
scanf("%s", &u1.lname);

printf("\n\nFATHER's NAME..");
scanf("%s", &u1.fathname);

printf("\n\nMOTHER's NAME..");
scanf("%s", &u1.mothname);

printf("\n\nADDRESS..");
scanf("%s", &u1.address);

printf("\n\nACCOUNT TYPE");
scanf("%s", &u1.typeaccount);

printf("\n\nDATE OF BIRTH..");
printf("\nDATE-");
scanf("%d", &u1.date);
printf("\nMONTH-");
scanf("%d", &u1.month);
printf("\nYEAR-");
scanf("%d", &u1.year);

printf("\n\nADHAR NUMBER");
scanf("%s", u1.adharnum);

printf("\n\nPHONE NUMBER");
scanf("%s", u1.pnumber);

printf("\n\nUSERNAME.. ");
scanf("%s", &u1.username);

printf("\n\nPASSWORD..");

// Taking password in the form of
// stars
for (i = 0; i < 50; i++) {
    ch = getch();
    if (ch != 13) {
        password[i] = ch;
        ch = '*';
        printf("%c", ch);
    }
}

```

```

        }
        else
            break;
    }

    // Writing to the file
    fwrite(&u1, sizeof(u1),
        1, fp);

    // Closing file
    fclose(fp);

    // Calling another function
    // after successful creation
    // of account
    accountcreated();
}

// Successful account creation
void accountcreated(void)
{
    int i;
    char ch;
    system("cls");
    printf(
        "PLEASE WAIT...\n\nYOUR DATA IS PROCESSING....");
    for (i = 0; i < 200000000; i++) {
        i++;
        i--;
    }

    gotoxy(30, 10);

    printf("ACCOUNT CREATED SUCCESSFULLY....");
    gotoxy(0, 20);

    printf("Press enter to login");

    getch();
    login();
}

// Login function to check
// the username of the user

```

```

void login(void)
{
    system("cls");

    char username[50];
    char password[50];

    int i, j, k;
    char ch;
    FILE *fp, *fu;
    struct pass u1;
    struct userpass u2;

    // Opening file of
    // user data
    fp = fopen("username.txt",
               "rb");

    if (fp == NULL) {
        printf("ERROR IN OPENING FILE");
    }
    gotoxy(34, 2);
    printf("ACCOUNT LOGIN ");
    gotoxy(7, 5);
    printf("*****");
    printf("*****");

    gotoxy(35, 10);
    printf("==== LOG IN ====");

    // Take input
    gotoxy(35, 12);
    printf("USERNAME.. ");
    scanf("%s", &username);

    gotoxy(35, 14);
    printf("PASSWORD..");

    // Input the password
    for (i = 0; i < 50; i++) {
        ch = getch();
        if (ch != 13) {
            password[i] = ch;
            ch = '*';
        }
    }
}

```

```

                printf("%c", ch);
            }

            else
                break;
        }

        // Checking if username
        // exists in the file or not
        while (fread(&u1, sizeof(u1),
                    1, fp)) {
            if (strcmp(username,
                        u1.username)
                == 0) {
                loginsu();
                display(username);
            }
        }

        // Closing the file
        fclose(fp);
    }

    // Redirect after
    // successful login
    void loginsu(void)
    {
        int i;
        FILE* fp;
        struct pass u1;
        system("cls");
        printf("Fetching account details.....\n");
        for (i = 0; i < 20000; i++) {
            i++;
            i--;
        }

        gotoxy(30, 10);
        printf("LOGIN SUCCESSFUL....");
        gotoxy(0, 20);
        printf("Press enter to continue");

        getch();
    }

```

```

// Display function to show the
// data of the user on screen
void display(char username1[])
{
    system("cls");
    FILE* fp;
    int choice, i;
    fp = fopen("username.txt", "rb");
    struct pass u1;

    if (fp == NULL) {
        printf("error in opening file");
    }

    while (fread(&u1, sizeof(u1),
                1, fp)) {
        if (strcmp(username1,
                    u1.username)
            == 0) {
            gotoxy(30, 1);
            printf("WELCOME, %s %s",
                    u1.fname, u1.lname);
            gotoxy(28, 2);
            printf(".....");
            gotoxy(55, 6);
            printf("==== YOUR ACCOUNT INFO ====");
            gotoxy(55, 8);
            printf("*****");
            gotoxy(55, 10);
            printf("NAME..%s %s", u1.fname,
                    u1.lname);

            gotoxy(55, 12);
            printf("FATHER's NAME..%s %s",
                    u1.fathname,
                    u1.lname);

            gotoxy(55, 14);
            printf("MOTHER's NAME..%s",
                    u1.mothname);

            gotoxy(55, 16);
            printf("ADHAR CARD NUMBER..%s",

```



```

        u1.adharnum);

        gotoxy(55, 18);
        printf("MOBILE NUMBER..%s",
            u1.pnumber);

        gotoxy(55, 20);
        printf("DATE OF BIRTH.. %d-%d-%d",
            u1.date, u1.month, u1.year);

        gotoxy(55, 22);
        printf("ADDRESS..%s", u1.address);

        gotoxy(55, 24);
        printf("ACCOUNT TYPE..%s",
            u1.typeaccount);
    }
}

fclose(fp);

gotoxy(0, 6);

// Menu to perform different
// actions by user
printf(" HOME ");
gotoxy(0, 7);
printf("*****");
gotoxy(0, 9);
printf(" 1....CHECK BALANCE");
gotoxy(0, 11);
printf(" 2....TRANSFER MONEY");
gotoxy(0, 13);
printf(" 3....LOG OUT\n\n");
gotoxy(0, 15);
printf(" 4....EXIT\n\n");

printf(" ENTER YOUR CHOICES..");
scanf("%d", &choice);

switch (choice) {
case 1:
    checkbalance(username1);
    break;

```

```

        case 2:
            transfermoney();
            break;

        case 3:
            logout();
            login();
            break;

        case 4:
            exit(0);
            break;
    }
}

// Function to transfer
// money from one user to
// another
void transfermoney(void)
{
    int i, j;
    FILE *fm, *fp;
    struct pass u1;
    struct money m1;
    char usernamet[20];
    char usernamep[20];
    system("cls");

    // Opening file in read mode to
    // read user's username
    fp = fopen("username.txt", "rb");

    // Creating a another file
    // to write amount along with
    // username to which amount
    // is going to be transfered
    fm = fopen("mon.txt", "ab");

    gotoxy(33, 4);
    printf("---- TRANSFER MONEY ----");
    gotoxy(33, 5);
    printf("=====");

```

```

gotoxy(33, 11);
printf("FROM (your username).. ");
scanf("%s", &username);

gotoxy(33, 13);
printf(" TO (username of person)..");
scanf("%s", &username);

// Checking for username if it
// is present in file or not
while (fread(&u1, sizeof(u1),
            1, fp))

{
    if (strcmp(username,
                u1.username)
        == 0) {
        strcpy(m1.username,
                u1.username);
        strcpy(m1.userpersonfrom,
                username);
    }
}

gotoxy(33, 16);

// Taking amount input
printf("ENTER THE AMOUNT TO BE TRANSFERED..");
scanf("%d", &m1.money);

// Writing to the file
fwrite(&m1, sizeof(m1),
      1, fm);

gotoxy(0, 26);
printf(
    "-----"
    "-----");

gotoxy(0, 28);
printf(
    "-----"
    "-----");

gotoxy(0, 29);

```

```

printf("transferring amount, Please wait..");

gotoxy(10, 27);
for (i = 0; i < 70; i++) {
    for (j = 0; j < 1200000; j++) {
        j++;
        j--;
    }
    printf("*");
}

gotoxy(33, 40);
printf("AMOUNT SUCCESSFULLY TRANSFERED....");
getch();

// Close the files
fclose(fp);
fclose(fm);

// Function to return
// to the home screen
display(username);
}

// Function to check balance
// in users account
void checkbalance(char username2[])
{
    system("cls");
    FILE* fm;
    struct money m1;
    char ch;
    int i = 1, summoney = 0;

    // Opening amount file record
    fm = fopen("mon.txt", "rb");

    int k = 5, l = 10;
    int m = 30, n = 10;
    int u = 60, v = 10;

    gotoxy(30, 2);
    printf("==== BALANCE DASHBOARD =====");
    gotoxy(30, 3);

```

```

printf("*****");
gotoxy(k, l);
printf("S no.");
gotoxy(m, n);
printf("TRANSACTION ID");
gotoxy(u, v);
printf("AMOUNT");

// Reading username to
// fetch the correct record
while (fread(&m1, sizeof(m1),
            1, fm)) {
    if (strcmp(username2,
                m1.username)
        == 0) {
        gotoxy(k, ++l);
        printf("%d", i);
        i++;
        gotoxy(m, ++n);
        printf("%s", m1.userpersonfrom);

        gotoxy(u, ++v);
        printf("%d", m1.money1);
        // Adding and
        // finding total money
        summoney = summoney + m1.money1;
    }
}

gotoxy(80, 10);
printf("TOTAL AMOUNT");

gotoxy(80, 12);
printf("%d", summoney);

getch();

// Closing file after
// reading it
fclose(fm);
display(username2);
}

// Logout function to bring

```

```
// user to the login screen
void logout(void)
{
    int i, j;
    system("cls");
    printf("please wait, logging out");

    for (i = 0; i < 10; i++) {
        for (j = 0; j < 25000000; j++) {
            i++;
            i--;
        }
        printf(".");
    }

    gotoxy(30, 10);
    printf("Sign out successfully..\n");

    gotoxy(0, 20);
    printf("press any key to continue..");

    getch();
}
```