#include <stdio.h>

#include <string.h>

#include <stdlib.h>

void user()

{

int c,p;

int i;

int j;

int s[10]={};

printf("\n\n +============================+\n ");

printf(" Welcome to Parking Reservations System ");

printf("\n +============================+\n\n");

for (j=0; j<10; j++)

{

printf(" +============================+ \n");

printf(" Vehicle type\n\n [1] Car\n [2] Bike\n\n [3] exit\n\n)");

printf(" +============================+ \n");

printf(" Choose: ");

scanf("%i",&c);

switch(c)

{

case 1:

printf(" +============================+\n");

printf(" Car Parking\n\n");

printf(" lot available\n |1|2|3|4|5|\n\n");

printf(" +============================+\n");

do

{

printf(" Pick a lot: ");

scanf("%i",&p);

s[j]=p;

for (i=0; i<j; i++)

{

if (s[j]==s[i])

{

printf("\n\n lot taken.\n\n");

break;

}

}

}

while (i!=j);

if(s[j] <= 5)

{

printf(" +============================+\n");

printf("\n");

printf(" Parking: car Parking\n");

printf(" lot No : %i Booked\n",s[j]);

printf("\n");

}

else

printf("\nWrong number! No lot for you!\n\n");

break;

case 2:

printf(" +============================+\n");

printf(" Bike Parking\n\n");

printf(" lot available\n |6|7|8|9|10|\n\n");

printf(" +============================+\n");

do

{

printf(" Pick a lot: ");

scanf("%i",&p);

s[j]=p;

for (i=0; i<j; i++)

{

if (s[j]==s[i])

{

printf("\n\n lot taken.\n\n");

break;

}

}

}

while (i!=j);

if(s[j] >= 6)

{

printf(" +============================+\n");

printf("\n");

printf(" Parking: Bike Parking\n");

printf(" lot No : %i Booked\n",s[j]);

printf("\n");

}

else

printf("\nWrong number! No lot for you!\n\n");

break;

case 3:

exit(0);

break;

}

}

}

void admin()

{

char a[6]="admin";

char b[6];

char c[6];

int t=1;

while(t>0)

{

printf("Enter username:");

scanf("%s",b);

if(strcmp(b,a)==0)

{

while(t>0)

{

printf("Enter Password:");

scanf("%s",c);

if(strcmp(c,a)==0)

{

printf("welcome Admin");

break;

}

else

{

printf("Wrong Password\nTry again\n");

}

}

break;

}

else

{

printf("Wrong username!\nTry again\n");

}

}

}

void sign\_in\_up()

{

struct signup

{

char name[100];

char last\_name[100];

char email\_mobno[100];

char password[100];

}a[100][100];

struct signin

{

char email\_mob\_no[100];

char password[100];

}b;

int t=1,c,i,n=0;

while(t>0)

{

printf("Enter 1-Sign up OR 2-Sign in:");

scanf("%d",&c);

if(c==1)

{

for(i=n;i<100;i++)

{

printf("Enter your name:");

scanf("%s",a[i][100].name);

printf("Enter your last name:");

scanf("%s",a[i][100].last\_name);

printf("Enter your email/mob no.:");

scanf("%s",a[i][100].email\_mobno);

printf("Enter your password:");

scanf("%s",a[i][100].password);

n++;

break;

}

FILE \*ufp;

ufp=fopen("details.txt","a");

if(ufp == NULL)

{

printf("File not Found");

}

else

{

fprintf(ufp,"%s %s %s %s\n",a[i][100].name,a[i][100].last\_name,a[i][100].email\_mobno,a[i][100].password);

printf("\n Record insert Sucessfull to the details file");

}

printf("\n");

fclose(ufp);

continue;

}

else if(c==2)

{

printf("Enter email/mob no.:");

scanf("%s",b.email\_mob\_no);

FILE \*fp;

fp = fopen("details.txt","r");

if(fp == NULL)

{

printf("File not found!");

exit(1);

}

else

{

while( fscanf(fp,"%s %s %s %s",a[i][100].name,a[i][100].last\_name,a[i][100].email\_mobno,a[i][100].password) != EOF)

{

for(i=0;i<=n;i++)

{

if(strcmp(b.email\_mob\_no,a[i][100].email\_mobno)==0)

{

while(t>0)

{

printf("Enter password:");

scanf("%s",b.password);

if(strcmp(b.password,a[i][100].password)==0)

{

printf("Welcome %s %s",a[i][100].name,a[i][100].last\_name);

break;

}

else

{

printf("You entered wrong password.\n");

continue;

}

}

break;

}

else

{

if(i==n)

{

printf("User does not exist.\nPLease enter valid email or mob no.");

printf("\nIf you are not signed up please sign up\n");

t=2;

break;

}

else

{

continue;

}

}

}

if(t==2)

{

continue;

}

else

{

break;

}

}

}

fclose(fp);

}

user();

}

}

int noc=0,nob=0,amount=0,count=0;

// noc/nob=number of car/bike

void car()

{

printf("\nEntry Successful");

noc++;

amount=amount+100;

count++;

}

void bike()

{

printf("\nEntry Successful");

nob++;

amount=amount+50;

count++;

}

void status()

{

printf("\nNumber of car/Jeep=%d",noc);

printf("\nNumber of bike=%d",nob);

printf("\nTotal Number of vehicles=%d",count);

printf("\nTotal amount=%d",amount);

FILE \*ufp;

ufp=fopen("oldTransaction.txt","a");

if(ufp == NULL)

{

printf("File not Found");

}

else

{

fprintf(ufp,"%d %d %d %d\n",noc,nob,count,amount);

printf("\n Record insert Sucessfull to the old record file");

}

printf("\n");

fclose(ufp);

}

void seeold()

{

FILE \*fp;

fp = fopen("oldTransaction.txt","r");

if(fp == NULL)

{

printf("File not found!");

exit(1);

}

else

{

printf("No of cars |No of bikes |Total vehicles|Total amount \n");

while( fscanf(fp,"%d %d %d %d",&noc,&nob,&count,&amount) != EOF)

{

printf("%-14d|%-14d|%-14d|%-14d\n",noc,nob,count,amount);

}

}

fclose(fp);

}

void main()

{

int a,b;

while(1)

{

printf("Enter\n1-admin login\n2-user login\n");

scanf("%d",&a);

switch(a)

{

case 1:

{

admin();

while(1)

{

printf("\n 1.Enter car/jeep");

printf("\n 2.Enter bike");

printf("\n 3.check status");

printf("\n 4.see old transaction");

printf("\n 5.exit");

printf("\n Enter your choice: ");

scanf("%d",&b);

switch(b)

{

case 1:

car();

break;

case 2:

bike();

break;

case 3:

status();

break;

case 4:

seeold();

break;

case 5:

exit(0);

default:

printf("\n Enter correct option");

}

}

break;

}

case 2:

{

sign\_in\_up();

user();

break;

}

}

}

}