//Soliman, Sean

//Class - 439 Sp 2018

//Test 2

//Menu, schedule, booking, and reporting for an airline

// Test 2.cpp : main project file.

#include "stdafx.h"

#include <iostream>

#include <conio.h>

using namespace System;

using namespace std;

void menuFunction();

void scheduleFunction();

void vacancyFunction();

void printReserv();

void reportFunction();

//change foneCounter, ftwoCounter, &/or fthreeCounter numbers to test flights

//max capacity for each(fone/ftwo/fthree)counter = 15(full)

int foneCounter = 0, ftwoCounter = 0, fthreeCounter = 0;

int choice, reportCounter = 1, report[45];

int main()

{

char minput;

system("color f0");

menu:menuFunction();

if(choice == 2){

reportFunction();

goto menu;

}

while(choice != 3){

scheduleFunction();

if(foneCounter<15 || ftwoCounter<15 || fthreeCounter<15){

printf("Press enter to book a flight or m to return to menu: ");

scanf("%c",&minput);

if(minput == 'm'){

goto menu;

}

vacancyFunction();

}else{

printf("\n\nAll flights are currently booked\n");

printf("\n\nPress enter to return to menu: ");

scanf("%c");

goto menu;

}

}

printf("\n\n");

printf("Program is exiting.\n\n");

system("pause");

return 0;

}

void menuFunction(){

system("cls");

printf("FAST FLIGHT AIRLINES\n");

printf("\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\n");

printf("1.Flight schedule, availability, and booking\n");

printf("2.Report of flights in order entered\n");

printf("3.Exit\n\n");

printf("Enter your selection: ");

scanf("%d",&choice);

scanf("%c");

}

void scheduleFunction(){

char full[5]="FULL", avail[10]="AVAILABLE";

system("cls");

printf("FAST FLIGHT AIRLINES\n");

printf("\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\n\n");

printf("NUMBER\tDAY\tTIME\t\tAVAILABILITY\n\n");

if(foneCounter<15){

printf("1\tMon\t6:00 AM\t\t%d\n",15-foneCounter);

}else{

printf("1\tMon\t6:00 AM\t\t%s\n",full);

}

if(ftwoCounter<15){

printf("2\tWed\t12:00 PM\t%d\n",15-ftwoCounter);

}else{

printf("2\tWed\t12:00 PM\t%s\n",full);

}

if(fthreeCounter<15){

printf("3\tFri\t6:00 PM\t\t%d\n",15-fthreeCounter);

}else{

printf("3\tFri\t6:00 PM\t\t%s\n",full);

}

printf("\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\n\n");

}

void vacancyFunction(){

int flightNum;

printf("\n\nEnter flight number to book: ");

scanf("%d", &flightNum);

report[reportCounter] = flightNum;

reportCounter++;

//book flight 1

if(flightNum == 1 && foneCounter < 15){

foneCounter++;

printf("\n\nFlight 1 booked\n");

printReserv();

}else if(flightNum == 1 && foneCounter >= 15){

printf("\n\nUnable to book flight\n");

printf("Flight 1 already full\n");

}

//book flight 2

if(flightNum == 2 && ftwoCounter < 15){

ftwoCounter++;

printf("\n\nFlight 2 booked\n");

printReserv();

}else if(flightNum == 2 && ftwoCounter >= 15){

printf("\n\nUnable to book flight\n");

printf("Flight 2 already full\n");

}

//book flight 3

if(flightNum == 3 && fthreeCounter < 15){

fthreeCounter++;

printf("\n\nFlight 3 booked\n");

printReserv();

}else if(flightNum == 3 && fthreeCounter >= 15){

printf("\n\nUnable to book flight\n");

printf("Flight 3 already full\n");

}

printf("\n\nPress enter to continue: ");

scanf("%c");

return;

}

void printReserv(){

char pinput;

printf("\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\n");

printf("\nWould you like to print your reservation?(y/n): ");

scanf("%c", &pinput);

scanf("%c", &pinput);

if(pinput == 'y'){

printf("\nPrinting your reservation...\n");

}

scanf("%c");

return;

}

void reportFunction(){

system("cls");

printf("Report of flights booked in order entered\n");

printf("\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\n\n");

if(reportCounter == 1){

printf("There are no reported flights booked as of yet\n");

}else{

for(int i=1; i<reportCounter; i++){

printf("%d. Flight %d\n", i, report[i]);

}

printf("\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\n\n");

printf("Total number of flights booked for each flight\n\n");

printf("Flight 1: %d\n", foneCounter);

printf("Flight 2: %d\n", ftwoCounter);

printf("Flight 3: %d\n", fthreeCounter);

}

printf("\n\nPress enter to return to menu: ");

scanf("%c");

}













